

SEE SHEET 3 FOR PLAN SHEET LAYOUT  
AT TIME OF INVESTIGATION

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
GEOTECHNICAL ENGINEERING UNIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4753	1	

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ROADWAY  
SUBSURFACE INVESTIGATION

COUNTY WAYNE  
PROJECT DESCRIPTION SR 1556 (WAYNE MEMORIAL DRIVE) FROM SR 1003 (NEW HOPE ROAD) TO I-42 (US 70 BYPASS)  
INVENTORY

CONTENTS

LINE	STATION	PLAN
-L-	6+79.24 TO 58+40.52	4 - 8
-Y1-	10+00 TO 32+14.68	4, 9 - 10
-Y2-	10+00 TO 11+30	5
-Y3-	12+45 TO 13+96.49	5
-Y4-	10+00 TO 11+25	5
-Y5-	13+55 TO 29+00	6, 11 - 12
-RPA-	10+85.32 TO 11+85.37	8
-RPC-	13+08.62 TO 14+89.21	7
-RPD-	12+87.32 TO 14+81.69	7

CROSS SECTIONS

LINE	STATION	SHEETS
-L-	9+50, 10+50 - 22+50	13 - 18
-L-	24+50, 26+50 - 27+00	18 - 19
-L-	28+00 - 28+50	19
-L-	30+50, 32+50, 34+50, 36+50	20
-L-	37+50 - 40+50	21 - 22
-L-	42+50, 44+50	22
-L-	46+50, 48+50, 50+50	23
-L-	52+50, 54+50	24
-Y1-	10+00 - 14+50	25 - 27
-Y1-	15+50 - 17+00	27 - 28
-Y1-	21+00, 22+00 - 32+14.68	28 - 33
-Y2-	10+43 - 11+30	34
-Y3-	13+50	35
-Y4-	10+40.50	36
-Y5-	16+50, 18+50, 20+00, 22+00	37
-Y5-	23+50, 25+50, 26+50 - 28+50	38 - 39

APPENDICES

APPENDIX	TITLE	SHEETS
A	LABORATORY TESTING SUMMARY	40

PERSONNEL

BUNCH, C. M.

RUSSEK, S. C.

BIGALOW, H. B.

INVESTIGATED BY RIGGS, Jr., A. F.

DRAWN BY FIELDS, W. D.

CHECKED BY RIGGS, Jr., A. F.

SUBMITTED BY TERRACON CONSULTANTS

DATE JANUARY 2026

Prepared in the Office of:



3150 SPRING FOREST ROAD, SUITE 100  
RALEIGH, NORTH CAROLINA 27616  
NC REGISTERED ENGINEERING FIRM: E-0869  
NC REGISTERED GEOLOGIC FIRM: C-367



DocuSigned by:

Abner Riggs Jr.

1/14/2026

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SIGNATURE

DATE

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

REFERENCE: U-4753

PROJECT: 39927

# NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS GEOTECHNICAL ENGINEERING UNIT

## SUBSURFACE INVESTIGATION

### SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

#### SOIL DESCRIPTION

SOIL IS CONSIDERED UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO THE STANDARD PENETRATION TEST (AASHTO T 208, ASTM D1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE, *VERY STIFF, GRAY, SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6*

#### SOIL LEGEND AND AASHTO CLASSIFICATION

GENERAL CLASS.	GRANULAR MATERIALS (≤ 35% PASSING #200)							SILT-CLAY MATERIALS (> 35% PASSING #200)				ORGANIC MATERIALS		
	A-1	A-1-b	A-2	A-2-4	A-2-5	A-2-6	A-2-7	A-4	A-5	A-6	A-7	A-1, A-2	A-3	A-4, A-5
GROUP CLASS.	A-1-a	A-1-b	A-2-4	A-2-5	A-2-6	A-2-7	A-4	A-5	A-6	A-7	A-1, A-2	A-3	A-4, A-5	A-6, A-7
SYMBOL														
% PASSING #10 #40 #200	50 MX 30 MX 15 MX	50 MX 25 MX	51 MN 35 MX	40 MX 35 MX	41 MN 35 MX	41 MN 35 MX	40 MX 36 MN	41 MN 36 MN	40 MX 36 MN	41 MN 36 MN	GRANULAR SOILS	SILT-CLAY SOILS	MUCK, PEAT	
MATERIAL PASSING #40 LL PI	- 6 MX	- NP	40 MX 41 MN 10 MX 11 MN	40 MX 41 MN 11 MN	40 MX 41 MN 11 MN	40 MX 41 MN 11 MN	40 MX 41 MN 11 MN	40 MX 41 MN 11 MN	40 MX 41 MN 11 MN	40 MX 41 MN 11 MN	SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER	HIGHLY ORGANIC SOILS		
GROUP INDEX	0	0	0	4 MX	8 MX	12 MX	16 MX	NO MX						
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL, AND SAND	FINE SAND	SILTY OR CLAYEY GRAVEL AND SAND	SILTY SOILS	CLAYEY SOILS									
GEN. RATING AS SUBGRADE	EXCELLENT TO GOOD			FAIR TO POOR			FAIR TO POOR	POOR	UNSATURABLE					

PI OF A-7-5 SUBGROUP IS ≤ LL - 30 ; PI OF A-7-6 SUBGROUP IS > LL - 30

#### CONSISTENCY OR DENSENESS

PRIMARY SOIL TYPE	COMPACTNESS OR CONSISTENCY	RANGE OF STANDARD PENETRATION RESISTANCE (N-VALUE)	RANGE OF UNCONFINED COMPRESSIVE STRENGTH (TONS/FT <sup>2</sup> )
GENERALLY GRANULAR MATERIAL (NON-COHESIVE)	VERY LOOSE LOOSE MEDIUM DENSE DENSE VERY DENSE	< 4 4 TO 10 10 TO 30 30 TO 50 > 50	N/A
GENERALLY SILT-CLAY MATERIAL (COHESIVE)	VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	< 2 2 TO 4 4 TO 8 8 TO 15 15 TO 30 > 30	< 0.25 0.25 TO 0.5 0.5 TO 1.0 1 TO 2 2 TO 4 > 4

#### TEXTURE OR GRAIN SIZE

U.S. STD. SIEVE SIZE OPENING (MM)	4	10	40	60	200	270
	4.76	2.00	0.42	0.25	0.075	0.053
BOULDER (BLDR.)						
COBBLE (COB.)						
GRAVEL (GR.)						
COARSE SAND (CSE. SD.)						
FINE SAND (F SD.)						
SILT (SL.)						
CLAY (CL.)						
GRAIN SIZE	305	75	2.0	0.25	0.05	0.005
	12	3				

#### SOIL MOISTURE - CORRELATION OF TERMS

SOIL MOISTURE SCALE (ATTERBERG LIMITS)	FIELD MOISTURE DESCRIPTION	GUIDE FOR FIELD MOISTURE DESCRIPTION
LL - LIQUID LIMIT	- SATURATED - (SAT.)	USUALLY LIQUID; VERY WET, USUALLY FROM BELOW THE GROUND WATER TABLE
PLASTIC RANGE (PI)	- WET - (W)	SEMISOLID; REQUIRES DRYING TO ATTAIN OPTIMUM MOISTURE
OM - OPTIMUM MOISTURE SHRINKAGE LIMIT	- MOIST - (M)	SOLID; AT OR NEAR OPTIMUM MOISTURE
SL - SHRINKAGE LIMIT	- DRY - (D)	REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE

#### PLASTICITY

	PLASTICITY INDEX (PI)	DRY STRENGTH
NON PLASTIC	0-5	VERY LOW
SLIGHTLY PLASTIC	6-15	SLIGHT
MODERATELY PLASTIC	16-25	MEDIUM
HIGHLY PLASTIC	26 OR MORE	HIGH

#### COLOR

DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE-BROWN). MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.

#### GRADATION

**WELL GRADED** - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE.  
**UNIFORMLY GRADED** - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE.  
**GAP-GRADED** - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES.

#### ANGULARITY OF GRAINS

THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: **ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.**

#### MINERALOGICAL COMPOSITION

MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.

#### COMPRESSIBILITY

SLIGHTLY COMPRESSIBLE LL < 31  
MODERATELY COMPRESSIBLE LL = 31 - 50  
HIGHLY COMPRESSIBLE LL > 50

#### PERCENTAGE OF MATERIAL

	GRANULAR SOILS	SILT - CLAY SOILS	OTHER MATERIAL
TRACE OF ORGANIC MATTER	2 - 3%	3 - 5%	TRACE 1 - 10%
LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE 10 - 20%
MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME 20 - 35%
HIGHLY ORGANIC	> 10%	> 20%	HIGHLY 35% AND ABOVE

#### GROUND WATER

- WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING
- STATIC WATER LEVEL AFTER 24 HOURS
- PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA
- SPRING OR SEEP

#### MISCELLANEOUS SYMBOLS

- ROADWAY EMBANKMENT (RE) WITH SOIL DESCRIPTION
- SOIL SYMBOL
- ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT
- INFERRED SOIL BOUNDARY
- INFERRED ROCK LINE
- ALLUVIAL SOIL BOUNDARY
- DIP & DIP DIRECTION OF ROCK STRUCTURES
- TEST BORING
- AUGER BORING
- CORE BORING
- MONITORING WELL
- PIEZOMETER INSTALLATION
- SLOPE INDICATOR INSTALLATION
- CONE PENETROMETER TEST
- SOUNDING ROD
- TEST BORING WITH CORE
- SPT N-VALUE

#### RECOMMENDATION SYMBOLS

- UNDERCUT
- SHALLOW UNDERCUT
- UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE
- UNCLASSIFIED EXCAVATION - ACCEPTABLE DEGRADABLE ROCK
- UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL

#### ABBREVIATIONS

- AR - AUGER REFUSAL
- BT - BORING TERMINATED
- CL - CLAY
- CPT - CONE PENETRATION TEST
- CSE - COARSE
- DMT - DILATOMETER TEST
- DPT - DYNAMIC PENETRATION TEST
- e - VOID RATIO
- F - FINE
- FOSS. - FOSSILIFEROUS
- FRAC. - FRACTURED, FRACTURES
- FRAGS. - FRAGMENTS
- HI. - HIGHLY
- MED. - MEDIUM
- MICA. - MICACEOUS
- MOD. - MODERATELY
- NP - NON PLASTIC
- ORG. - ORGANIC
- PMT - PRESSUREMETER TEST
- SAP. - SAPROLITIC
- SD. - SAND, SANDY
- SL. - SILT, SILTY
- SLI. - SLIGHTLY
- TCR - TRICONE REFUSAL
- w - MOISTURE CONTENT
- V - VERY
- VST - VANE SHEAR TEST
- WEA. - WEATHERED
- W - UNIT WEIGHT
- W<sub>d</sub> - DRY UNIT WEIGHT
- S - BULK
- SS - SPLIT SPOON
- ST - SHELBY TUBE
- RS - ROCK
- RT - RECOMPACTED TRIAXIAL
- CBR - CALIFORNIA BEARING RATIO

#### EQUIPMENT USED ON SUBJECT PROJECT

- DRILL UNITS:
  - CME-45C
  - CME-55
  - CME-550
  - VANE SHEAR TEST
  - PORTABLE HOIST
- ADVANCING TOOLS:
  - CLAY BITS
  - 6" CONTINUOUS FLIGHT AUGER
  - 8" HOLLOW AUGERS
  - HARD FACED FINGER BITS
  - TUNG-CARBIDE INSERTS
  - CASING  W/ ADVANCER
  - TRICONE \_\_\_\_\_ \* STEEL TEETH
  - TRICONE \_\_\_\_\_ \* TUNG-CARB.
  - CORE BIT
- HAMMER TYPE:
  - AUTOMATIC  MANUAL
- CORE SIZE:
  - B \_\_\_\_\_  -H \_\_\_\_\_
  - N \_\_\_\_\_
- HAND TOOLS:
  - POST HOLE DIGGER
  - HAND AUGER
  - SOUNDING ROD
  - VANE SHEAR TEST

#### ROCK DESCRIPTION

HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TESTED, AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS IN NON-COASTAL PLAIN MATERIAL. THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK. ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:

- WEATHERED ROCK (WR)  
NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 BLOWS PER FOOT IF TESTED.
- CRYSTALLINE ROCK (CR)  
FINE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, GNEISS, GABBRO, SCHIST, ETC.
- NON-CRYSTALLINE ROCK (NCR)  
FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC.
- COASTAL PLAIN SEDIMENTARY ROCK (CP)  
COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.

#### WEATHERING

- FRESH** - ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER HAMMER IF CRYSTALLINE.
- VERY SLIGHT (IV SLI.)** - ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN. CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY. ROCK RINGS UNDER HAMMER BLOWS IF OF A CRYSTALLINE NATURE.
- SLIGHT (SLI.)** - ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO 1 INCH. OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS.
- MODERATE (MOD.)** - SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS. IN GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CLAY. ROCK HAS DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED WITH FRESH ROCK.
- MODERATELY SEVERE (MOD. SEV.)** - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES "CLUNK" SOUND WHEN STRUCK. *IF TESTED, WOULD YIELD SPT REFUSAL*
- SEVERE (SEV.)** - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES > 100 BPF*
- VERY SEVERE (IV SEV.)** - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT ONLY MINOR VESTIGES OF ORIGINAL ROCK FABRIC REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES < 100 BPF*
- COMPLETE** - ROCK REDUCED TO SOIL. ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND SCATTERED CONCENTRATIONS. QUARTZ MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS ALSO AN EXAMPLE.

#### ROCK HARDNESS

- VERY HARD** - CANNOT BE SCRATCHED BY KNIFE OR SHARP PICK. BREAKING OF HAND SPECIMENS REQUIRES SEVERAL HARD BLOWS OF THE GEOLOGIST'S PICK.
- HARD** - CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY. HARD HAMMER BLOWS REQUIRED TO DETACH HAND SPECIMEN.
- MODERATELY HARD** - CAN BE SCRATCHED BY KNIFE OR PICK. GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE EXCAVATED BY HARD BLOW OF A GEOLOGIST'S PICK. HAND SPECIMENS CAN BE DETACHED BY MODERATE BLOWS.
- MEDIUM HARD** - CAN BE GROUDED OR GOUGED 0.05 INCHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT. CAN BE EXCAVATED IN SMALL CHIPS TO PIECES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE POINT OF A GEOLOGIST'S PICK.
- SOFT** - CAN BE GROUDED OR GOUGED READILY BY KNIFE OR PICK. CAN BE EXCAVATED IN FRAGMENTS FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODERATE BLOWS OF A PICK POINT. SMALL, THIN PIECES CAN BE BROKEN BY FINGER PRESSURE.
- VERY SOFT** - CAN BE CARVED WITH KNIFE. CAN BE EXCAVATED READILY WITH POINT OF PICK. PIECES 1 INCH OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE. CAN BE SCRATCHED READILY BY FINGER NAIL.

#### FRACTURE SPACING

TERM	SPACING
VERY WIDE	MORE THAN 10 FEET
WIDE	3 TO 10 FEET
MODERATELY CLOSE	1 TO 3 FEET
CLOSE	0.16 TO 1 FOOT
VERY CLOSE	LESS THAN 0.16 FEET

#### BEDDING

TERM	THICKNESS
VERY THICKLY BEDDED	4 FEET
THICKLY BEDDED	1.5 - 4 FEET
THINLY BEDDED	0.16 - 1.5 FEET
VERY THINLY BEDDED	0.03 - 0.16 FEET
THICKLY LAMINATED	0.008 - 0.03 FEET
THINLY LAMINATED	< 0.008 FEET

#### INDURATION

FOR SEDIMENTARY ROCKS, INDURATION IS THE HARDENING OF MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC.

#### TERMS AND DEFINITIONS

- ALLUVIUM (ALLUV.)** - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.
- AQUIFER** - A WATER BEARING FORMATION OR STRATA.
- ARENACEOUS** - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.
- ARGILLACEOUS** - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC.
- ARTESIAN** - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE.
- CALCAREOUS (CALC.)** - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.
- COLLUVIUM** - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.
- CORE RECOVERY (REC.)** - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
- DIKE** - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.
- DIP** - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.
- DIP DIRECTION (DIP AZIMUTH)** - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.
- FAULT** - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.
- FISSILE** - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.
- FLOAT** - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLOADED FROM PARENT MATERIAL.
- FLOOD PLAIN (FP)** - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.
- FORMATION (FM)** - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.
- JOINT** - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.
- LEDGE** - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.
- LENS** - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.
- MOTTLED (MOT.)** - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.
- PERCHED WATER** - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.
- RESIDUAL (RES.) SOIL** - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.
- ROCK QUALITY DESIGNATION (ROD)** - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
- SAPROLITE (SAP.)** - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.
- SILL** - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.
- SLICKENSIDE** - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.
- STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT)** - NUMBER OF BLOWS (N OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.
- STRATA CORE RECOVERY (SREC.)** - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.
- STRATA ROCK QUALITY DESIGNATION (SROD)** - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.
- TOPSOIL (TS.)** - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.

#### BENCH MARK: BORINGS PROJECTED USING PROVIDED TIN FILE

u4753\_rdy\_tin.tin; DATED 04/18/2019

ELEVATION: FEET

#### NOTES:

- FIAD - FILLED IMMEDIATELY AFTER DRILLING
- HAR - HAND AUGER REFUSAL

**TIP PROJECT: U-4753**

**CONTRACT: C205130**

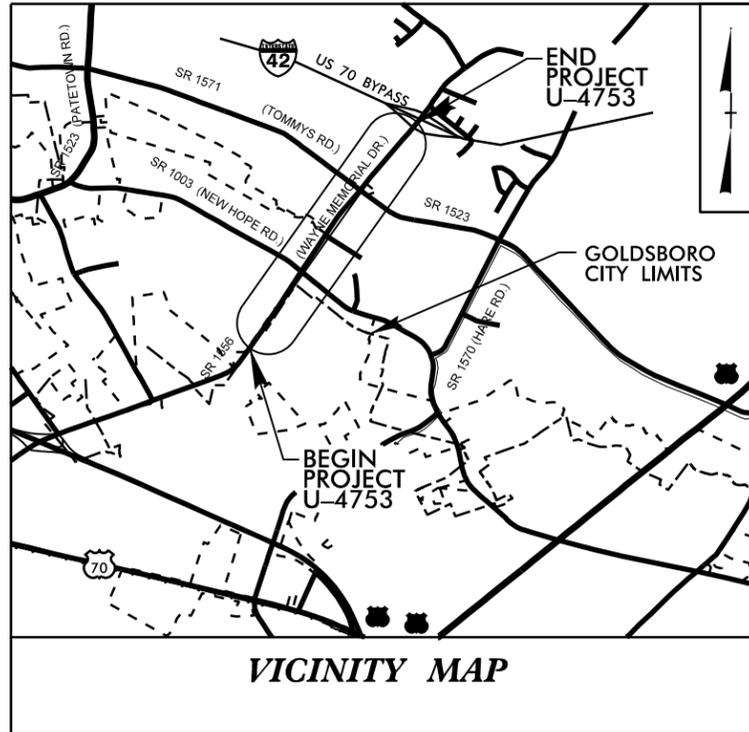
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**WAYNE COUNTY**

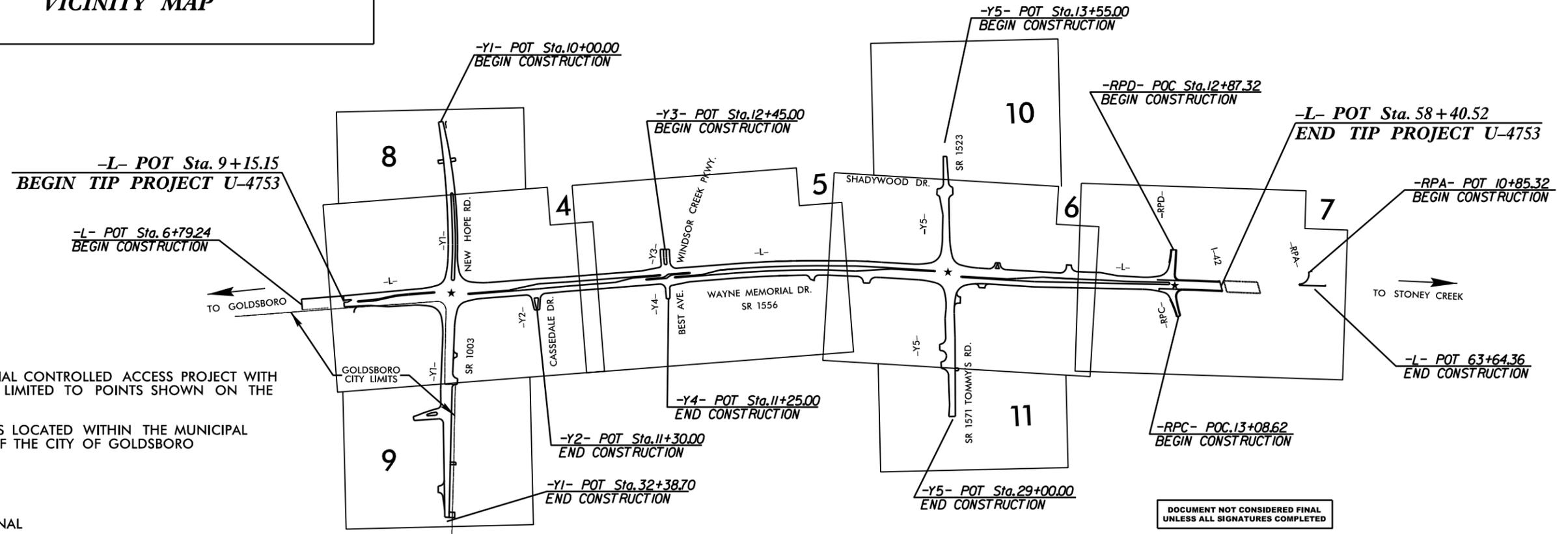
**LOCATION: SR 1556 (WAYNE MEMORIAL DRIVE) FROM SR 1003 (NEW HOPE ROAD) TO I-42 (FORMERLY US-70) IN GOLDSBORO WIDEN TO FOUR LANES.**

**TYPE OF WORK: DRAINAGE, GRADING, PAVING, SIGNALS & SIGNING**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4753	3	40
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
39927.1.1	NA	PE	
39927.2.1		ROW	
39927.2.2		UTIL	
39927.3.1		CONST	



VICINITY MAP



THIS IS A PARTIAL CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS SHOWN ON THE PLANS.  
THIS PROJECT IS LOCATED WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF GOLDSBORO

\* DENOTES SIGNAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

<p><b>GRAPHIC SCALES</b></p>	<p><b>DESIGN DATA</b></p> <p>ADT 2026 = 20,700 ADT 2046 = 26,600 K = 8 % D = 60 % T = 3 % * V = 50 MPH * TTST =1 DUAL =2 FUNC CLASS = MINOR ARTERIAL</p>	<p><b>PROJECT LENGTH</b></p> <p>LENGTH OF ROADWAY TIP PROJECT U-4753 = 0.933 MI. TOTAL LENGTH OF TIP PROJECT U-4753 = 0.933 MI.</p>	<p>Prepared for the North Carolina Department of Transportation in the office of:</p> <p><b>PARSONS</b> SUNGATE DESIGN GROUP, P.A.</p> <p>2024 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: MAY 21 2019</p> <p>LETTING DATE: JANUARY 20, 2026</p>	<p><b>AYMAN L. ALQUDWAH, PE</b> PROJECT ENGINEER</p> <p><b>DAVID B. GARRETT</b> PROJECT DESIGN ENGINEER</p> <p><b>RACHEL EVANS, PE</b> NCDOT CONTACT</p>	<p><b>HYDRAULICS ENGINEER</b></p> <p><b>JOSHUA G. DALTON</b> P.E.</p> <p><b>ROADWAY DESIGN ENGINEER</b></p> <p><b>AYMAN L. ALQUDWAH</b> P.E.</p>	
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PROJECT REFERENCE NO.	SHEET NO.
U-4753	3A

Date: January 13, 2026  
 WBS Number: 39927.1.1  
 TIP Number: U-4753  
 County: Wayne  
 Description: SR 1556 (Wayne Memorial Drive) from SR 1003 (New Hope Road) to I-42 (US 70 Bypass)

**Subject: Roadway Geotechnical Report - Inventory**

**Project Description**

The project is in Goldsboro, North Carolina along existing Wayne Memorial Drive (-L-) corridor between New Hope Road (-Y1-) and Ramps -RPD- and -RPC- of Interstate 42 in Wayne County. The total length of the project is approximately 0.933 miles. The project also crosses the alignments of Tuckahoe Drive (-Y1-), Planters Walk (-Y2-), Welcome Drive (-Y3-), Quail Ridge Road (-Y4-), Scarborough Road (-Y5-), Scott Street (-Y6-), Quail Ridge Loop Road (-Y7-), Barnes Street (-Y8-), Paramore Drive (-Y9-), York Road (-Y10-), Wellons Drive (-Y11-) and Red Banks Road (-Y12-). The project consists of widening existing lanes to the outside shoulders and inside medians and adding turn lanes. The project corridor is in a mostly rural setting with cultivated fields, residences and a few retail businesses including a Wal-Mart.

The geotechnical subsurface investigation was performed in May 2019. The site was investigated with a total of forty-two (42) hand auger borings advanced to depths of 2 to 12 feet beneath the ground surface. Hand auger borings L\_3450, L\_3850, Y1\_2300, and Y1\_2900 were terminated at depths of 5.5 to 7.4 feet, on hard clays or gravel. Representative soil samples were collected in the field for visual classification and selected samples were submitted for laboratory analysis by Terracon’s soil testing laboratory. Laboratory testing was performed in accordance with the AASHTO Soil Classification System.

The following alignment was investigated by soil testing and visual reconnaissance:

<u>Alignment</u>	<u>Stations (±)</u>
-L-	6+79 to 58+41
-Y1-	10+00 to 32+15
-Y2-	10+00 to 11+30
-Y3-	12+45 to 13+96
-Y4-	10+00 to 11+25
-Y5-	13+55 to 29+00

**Physiography and Geology**

The site is located in Wayne County, within the Coastal Plain Physiographic and Geologic Province. The Coastal Plain Province is characterized by subdued topographic features. The natural ground elevations along the investigated corridor range from approximately 121 feet to the south to 138 feet to the north with roadway embankments as high as elevation 149 feet near US 70 Bypass. In general, the topography at this site is generally flat with some gentle slopes.

The Inner Coastal Plain Physiographic Province consists of a wedge of unconsolidated sands, silt, marl, and other clays interbedded with occasional limestone strata, which rests atop crystalline basement rocks.

Based on previous mapping (N.C. Geologic Map 1985) and our knowledge of the local geology, the site falls within the Tertiary Age Yorktown Formation. However, based on our site visit and subsurface conditions encountered, the near surface soils appear to be recent Undivided Coastal Plain deposits of sands, silts, and clays, typical of Undivided Coastal Plain soils. This type of deposition has resulted in a relatively consistent subsurface profile along the project alignment. The Undivided Coastal Plain deposits underlie the clays, silts and sands that make up the roadway embankment and artificial fill materials. These near surface soils overlie the Yorktown Formation. The Yorktown Formation soils are described as fossiliferous clay with varying amounts of fine-grained sand and bluish-gray shell material commonly concentrated in lenses mainly in the area north of the Neuse River.

**Soil Properties**

Soils encountered during this investigation are separated into three categories based on their origin; roadway embankment fill, artificial fill, and Undivided Coastal Plain deposited soils.

Roadway embankment soils were encountered at the following approximate locations:

<u>Alignment</u>	<u>Stations (±)</u>
-L-	19+55 to 21+75
-L-	49+75 to 57+00
-Y1-	14+25 to 18+55

The roadway embankment soils encountered appear to be derived from the on-site soils along the -L- alignment. Roadway embankment fill was encountered up to a maximum depth of about 16 feet at the south approach to the US 70 Bypass. The roadway embankment soils predominately consist of loose to dense, moist, silty fine to coarse sand, trace clay, gravel and asphalt debris (A-2-4) and slightly plastic clayey fine to coarse sand (A-2-6). The plasticity indices of the sandy soils tested range from 3 to 4 percent with 17 to 25 percent passing the #200 sieve.

Artificial fill soils were encountered at the following approximate locations:

<u>Alignment</u>	<u>Stations (±)</u>
-L-	25+50 to 27+00
-L-	27+50 to 31+50

Artificial fill soils were encountered along several berms constructed along the left shoulder of the roadway to a depth of about 3.5 feet beneath the ground surface. The artificial fill soils consist of loose, dry, silty fine sand (A-2-4). These soils appeared to be non-plastic and no laboratory testing was performed on these soils.

<b>PROJECT REFERENCE NO.</b>	<b>SHEET NO.</b>
U-4753	3B

Undivided Coastal Plain deposits are present at the surface along the shoulders and beneath the roadway embankment and artificial fill soils. The Undivided Coastal Plain soils can be generalized as alternating layers of sand, silt and clay. The near surface Undivided Coastal Plain sands generally consist of loose to medium dense, dry to wet, silty and clayey fine to coarse sands (A-2-4 and A-2-6) with trace gravel and organics. The tested clayey sands were slightly plastic and exhibited plasticity indices of 12 to 15 percent with 32 to 35 percent passing the #200 sieve. The cohesive soils consist of medium stiff to hard, moist to wet, non-plastic to slightly plastic fine sandy silt (A-4), slightly to highly plastic fine to coarse sandy clay (A-6) and moderately to highly plastic silty clay (A-7-6) with trace gravel. These cohesive soils were encountered at or near the existing ground surface on most of the project. The plasticity indices of the clayey soils range from 6 to 29 percent with 36 to 68 percent passing the #200 sieve and natural moisture contents of 16 to 25 percent based on laboratory testing.

**Groundwater**

Generally, groundwater and surface water runoff along the project flows south and east to the Neuse River which empties into Pamlico Sound. Groundwater was encountered during drilling and sampling along the alignment investigated at depths as shallow as 2 feet to greater than 10 feet beneath the ground surface. At the time of our investigation no water was observed standing in the shoulder ditches. Groundwater where encountered, was typically between 4 and 6 feet beneath the ground surface at elevations ranging from as high as 125.6 feet at the north end of the corridor to as low as about 118.1 feet along the south end of the corridor.

The depth of groundwater, beneath the ground surface, will fluctuate with seasonal precipitation and may occur at higher levels at other times of the year above less permeable clayey soils.

**Areas of Special Geotechnical Interest**

1) Plastic Soils - Moderately to highly plastic soils with plastic indices (PI) of 16 or greater were encountered at the following locations:

<u>Alignment</u>	<u>Stations (±)</u>
-L-	6+79 to 23+00
-L-	26+00 to 27+50
-L-	28+50 to 29+00
-L-	37+75 to 53+00
-Y1-	10+00 to 32+15
-Y2-	10+00 to 11+30
-Y3-	12+45 to 13+96
-Y4-	10+00 to 11+25
-Y5-	13+55 to 24+50

A discussion of these plastic soils is located above in the section titled "Soil Properties".

2) Groundwater- The following intervals were found to exhibit a high-water table, seasonal high groundwater or potential for groundwater related construction problems:

<u>Alignment</u>	<u>Stations (±)</u>
-L-	16+00 to 47+00
-Y1-	10+00 to 32+15
-Y2-	10+00 to 11+30
-Y4-	10+00 to 11+25
-Y5-	13+55 to 29+00

3) Environmental- A petroleum like odor was detected in the sandy clayey soils in boring L\_4450 between the depths of 3 to 8 feet, located 40 feet right of the -L- centerline at the following interval:

<u>Alignment</u>	<u>Stations (±)</u>
-L-	44+50

**BULK SAMPLES**

No bulk samples were obtained.

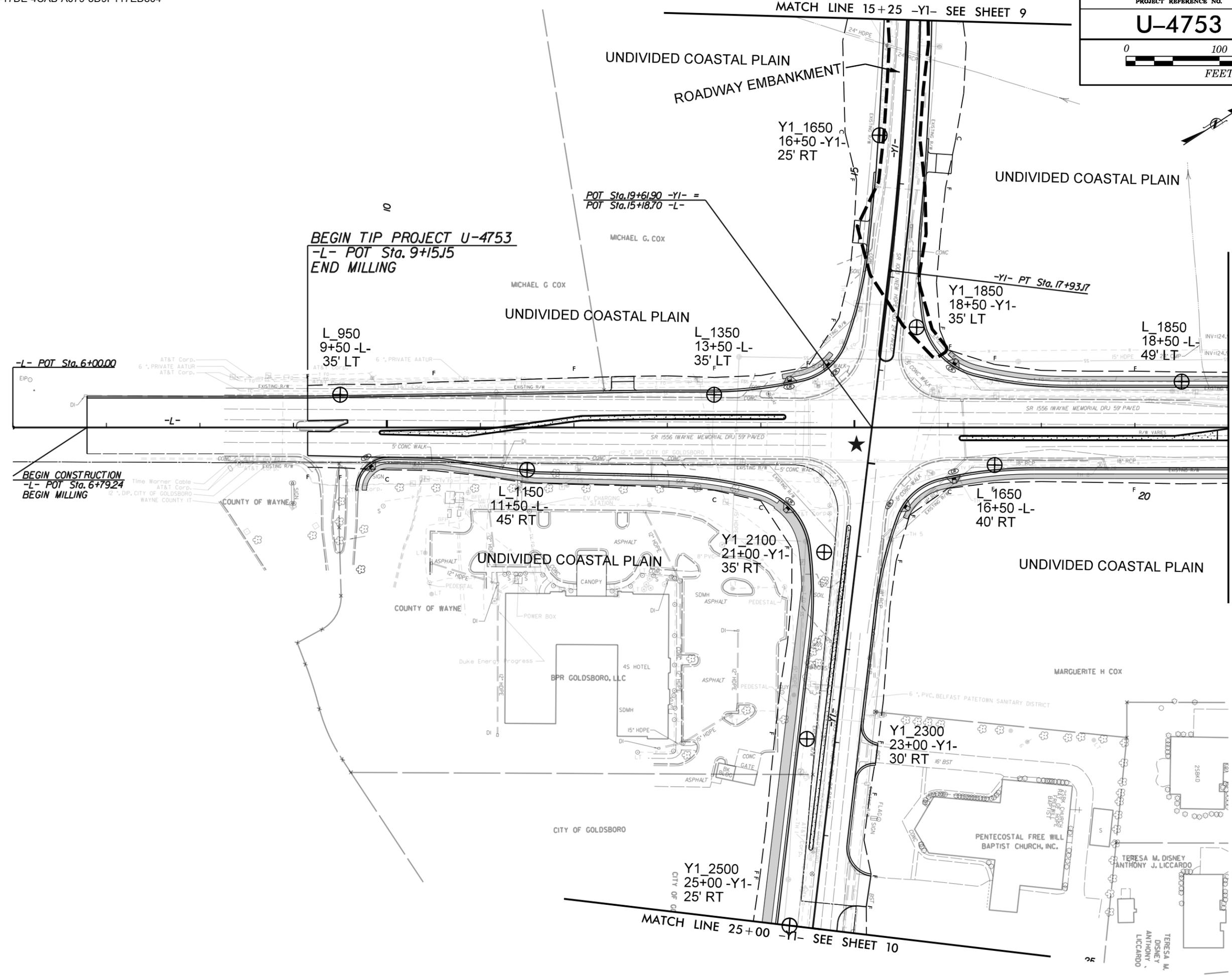
Sincerely,  
Terracon Consultants, Inc.



DocuSigned by:  
*Abner Riggs Jr.* 1/14/2026  
C2F6ACA84D274B1...  
Abner F. Riggs, Jr., PE  
Senior Geotechnical Engineer

Signed by:  
*Matthew Hartman* 1/14/2026  
C292402FCACB445...  
Matthew L. Hartman, PG  
Project Geologist

PROJECT REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>4</b>
<p>0 100 200 FEET</p>	



**BEGIN TIP PROJECT U-4753**  
 -L- POT Sta. 9+15J5  
 END MILLING

-L- POT Sta. 6+00.00

**BEGIN CONSTRUCTION**  
 -L- POT Sta. 6+79.24  
 BEGIN MILLING

L\_950  
 9+50 -L-  
 35' LT

L\_1350  
 13+50 -L-  
 35' LT

Y1\_1850  
 18+50 -Y1-  
 35' LT

L\_1850  
 18+50 -L-  
 49' LT

L\_1150  
 11+50 -L-  
 45' RT

Y1\_2100  
 21+00 -Y1-  
 35' RT

L\_1650  
 16+50 -L-  
 40' RT

Y1\_2300  
 23+00 -Y1-  
 30' RT

Y1\_2500  
 25+00 -Y1-  
 25' RT

MATCH LINE 25+00 -Y1- SEE SHEET 10

MATCH LINE 19+00 -L- SEE SHEET 5



MICHAEL G. COX

MICHAEL G. COX

UNDIVIDED COASTAL PLAIN

UNDIVIDED COASTAL PLAIN

UNDIVIDED COASTAL PLAIN

UNDIVIDED COASTAL PLAIN

CITY OF GOLDSBORO

COUNTY OF WAYNE

MARGUERITE H COX

PENTECOSTAL FREE WILL BAPTIST CHURCH, INC.

TERESA M. DISNEY ANTHONY J. LICCARDIO

TERESA M. DISNEY ANTHONY J. LICCARDIO

BPR GOLDSBORO, LLC

4S HOTEL

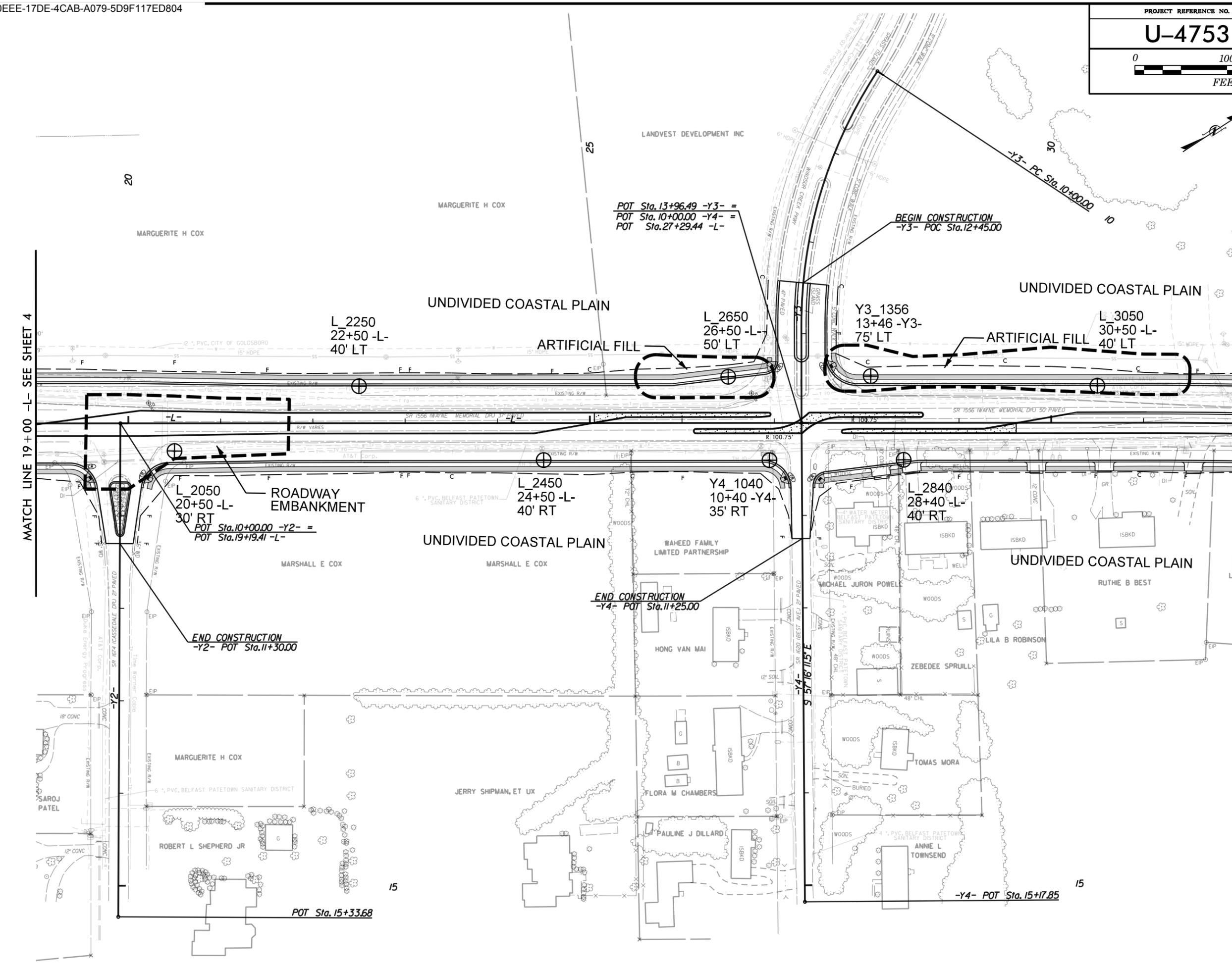
POWER BOX

EV CHARGING STATION

CANOPY

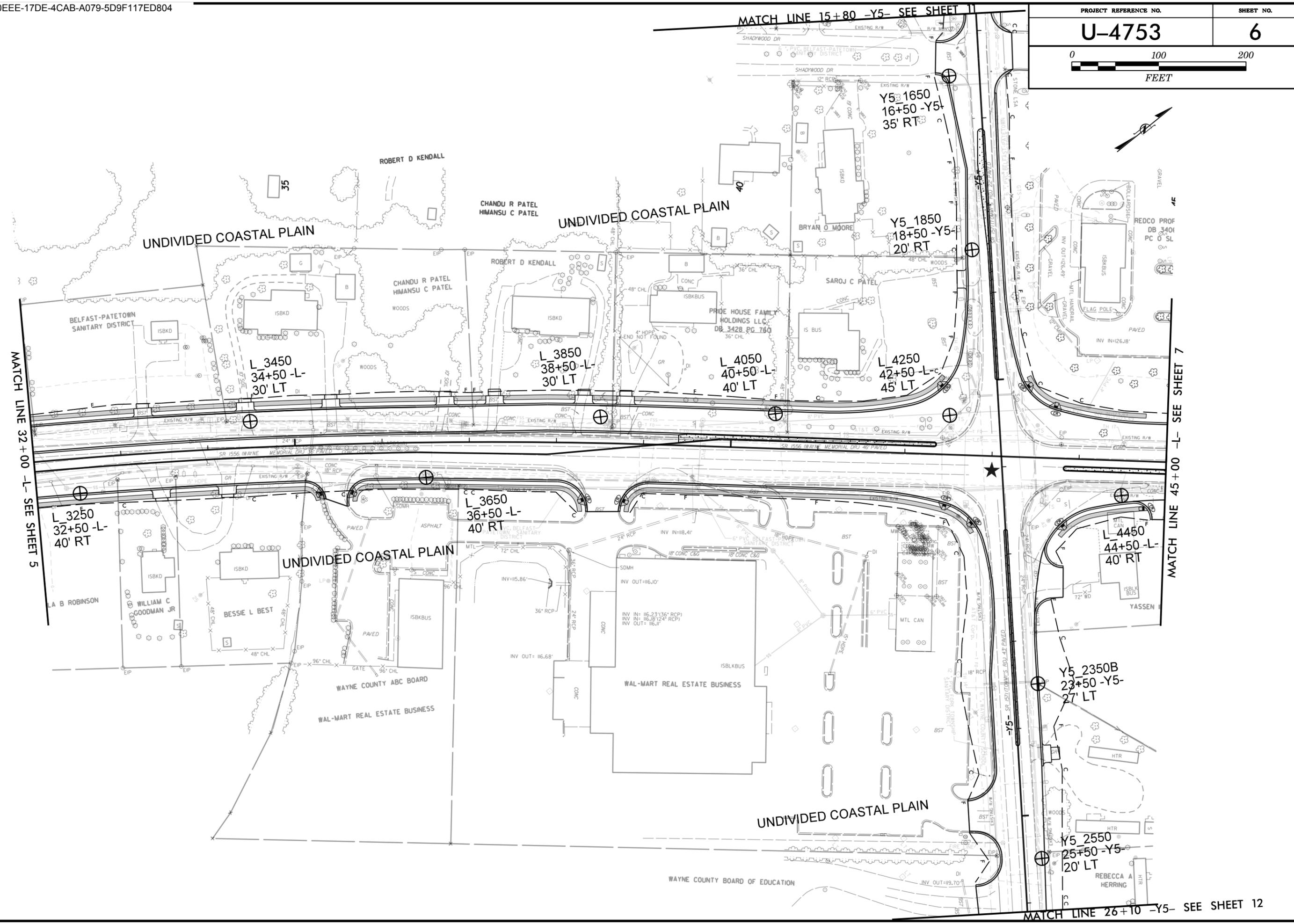
ASPHALT

PROJECT REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>5</b>
<p>0 100 200 FEET</p>	

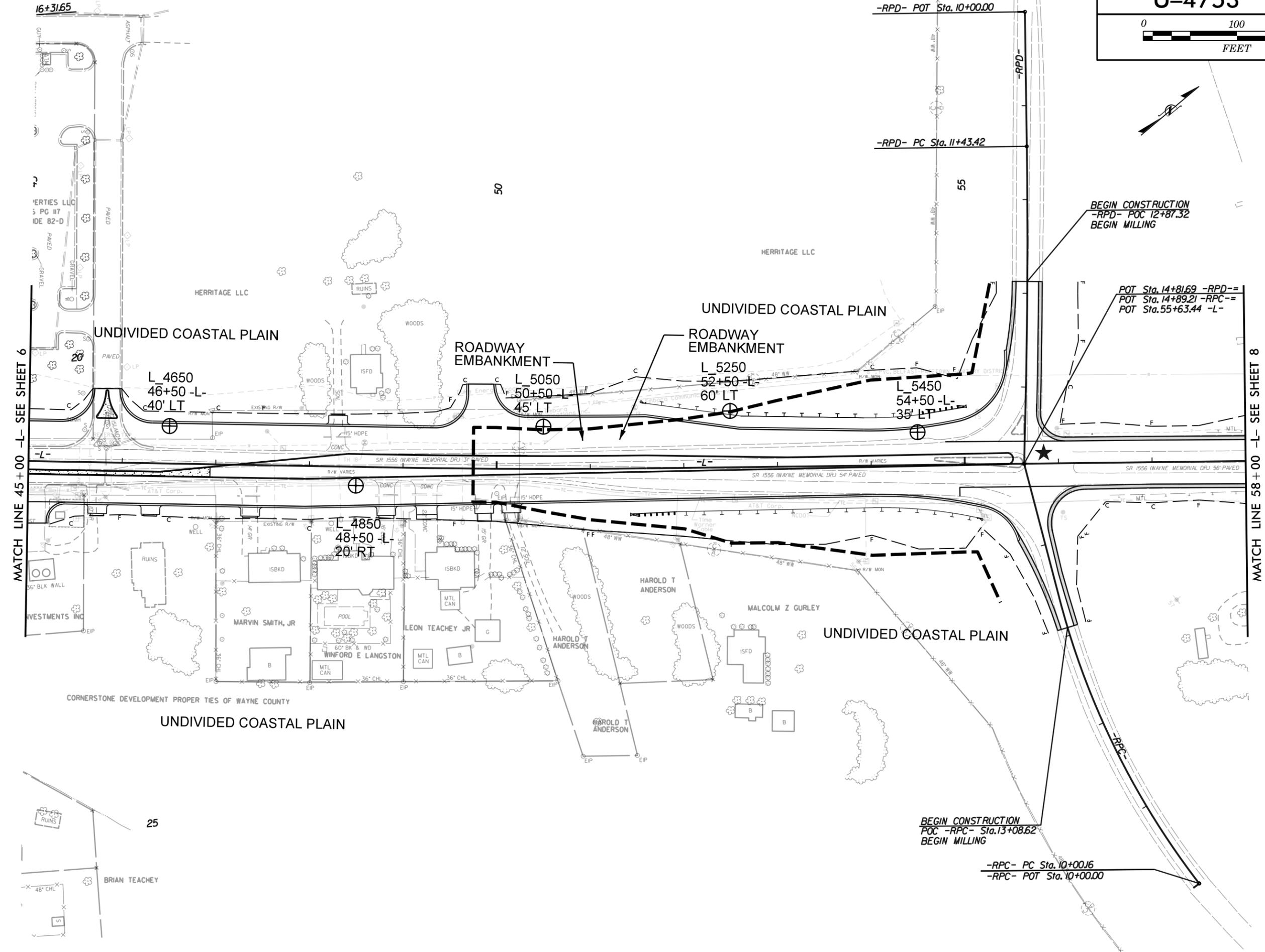


MATCH LINE 19+00 -L- SEE SHEET 4

MATCH LINE 32+00 -L- SEE SHEET 6



PROJECT REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>7</b>
<p>0 100 200 FEET</p>	



BEGIN CONSTRUCTION  
-RPD- POC 12+87.32  
BEGIN MILLING

POT Sta. 14+81.69 -RPD-=  
POT Sta. 14+89.21 -RPC-=  
POT Sta. 55+63.44 -L-

BEGIN CONSTRUCTION  
POC -RPC- Sta. 13+08.62  
BEGIN MILLING

-RPC- PC Sta. 10+00.16  
-RPC- POT Sta. 10+00.00

MATCH LINE 45+00 -L- SEE SHEET 6

MATCH LINE 58+00 -L- SEE SHEET 8

PROJECT REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>8</b>
FEET	



MATCH LINE 58+00 -L- SEE SHEET 7

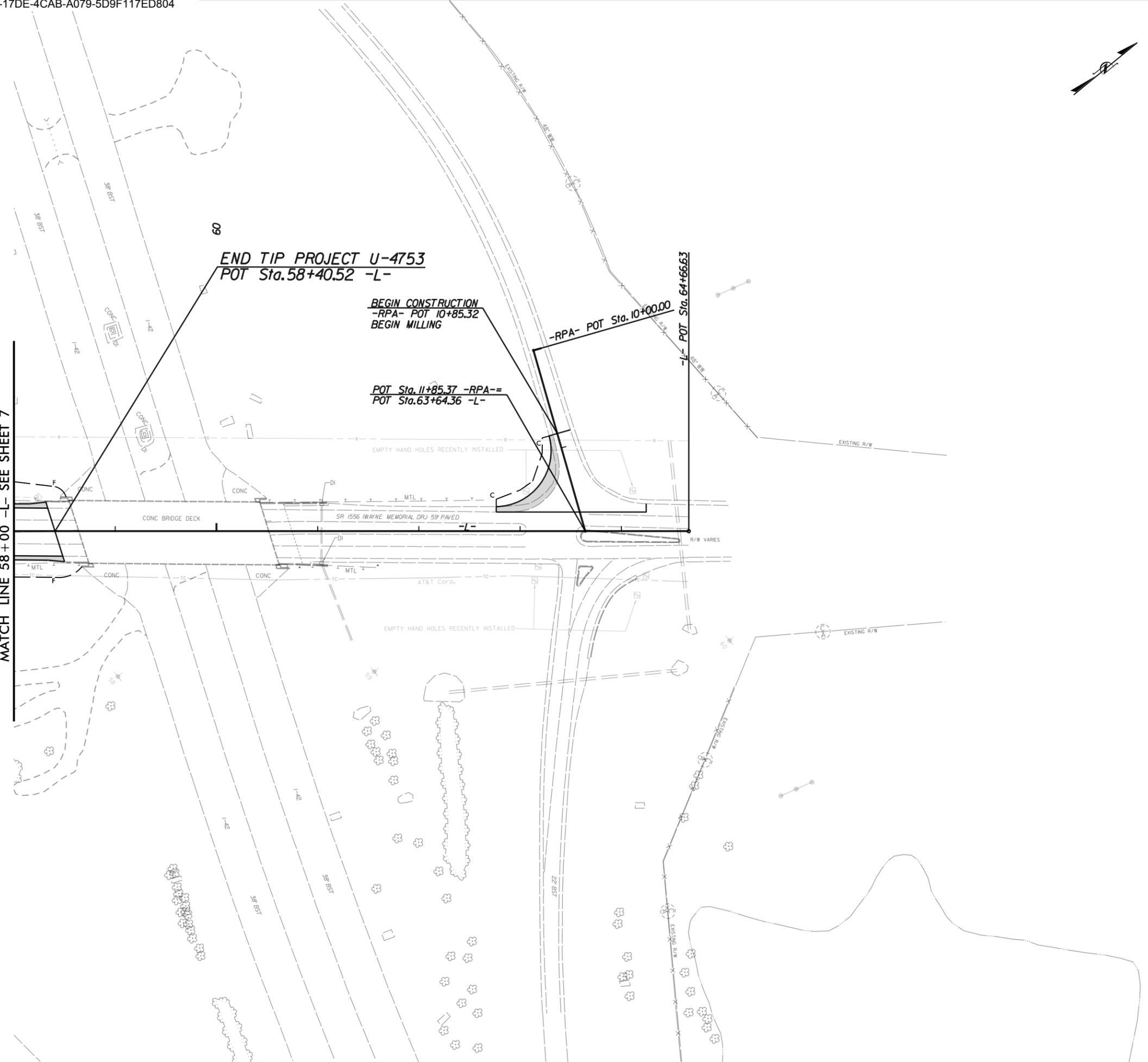
**60**  
**END TIP PROJECT U-4753**  
**POT Sta. 58+40.52 -L-**

**BEGIN CONSTRUCTION**  
**-RPA- POT 10+85.32**  
**BEGIN MILLING**

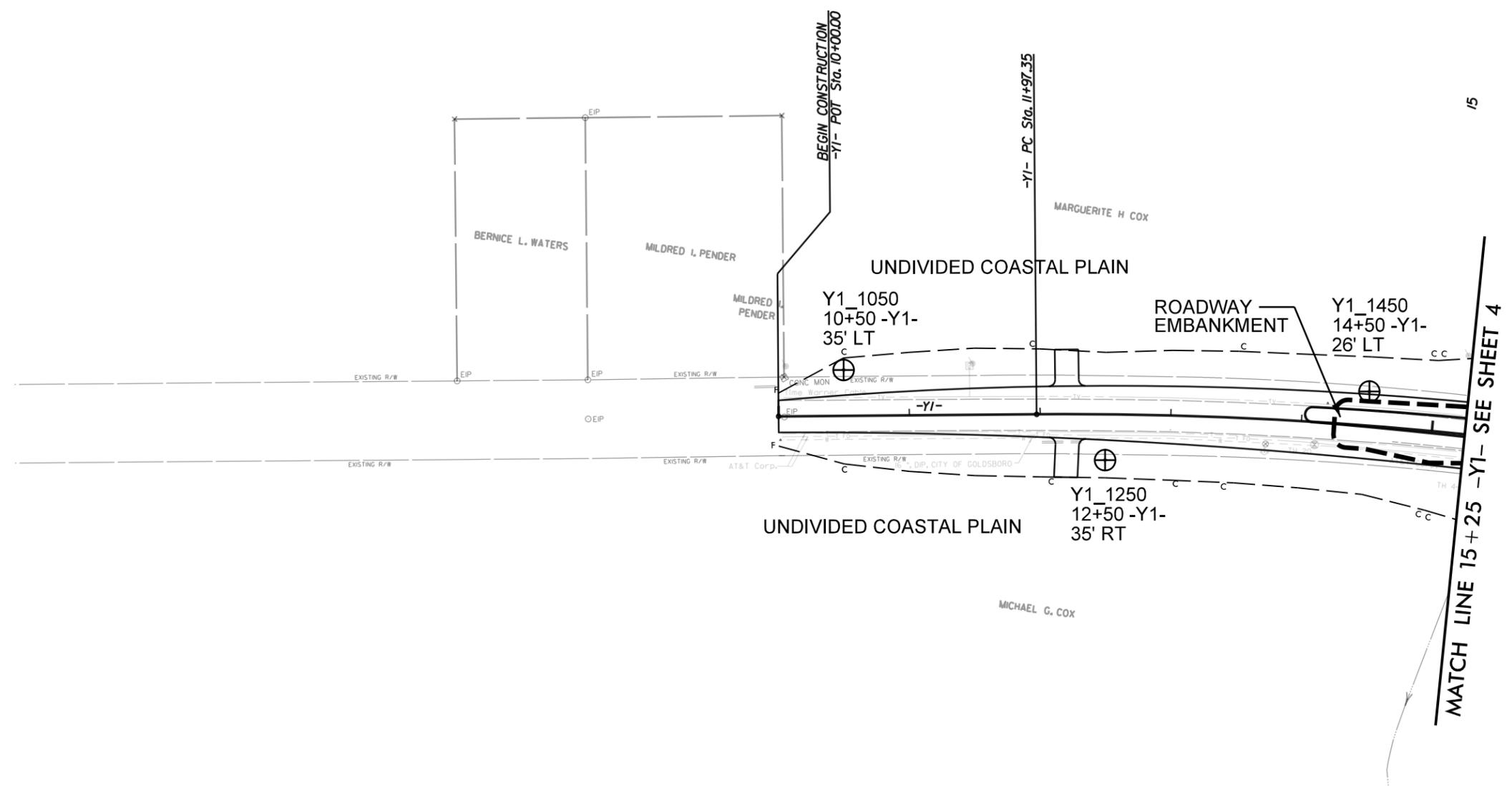
**POT Sta. 11+85.37 -RPA-#**  
**POT Sta. 63+64.36 -L-**

**-RPA- POT Sta. 10+00.00**

**-L- POT Sta. 64+66.63**

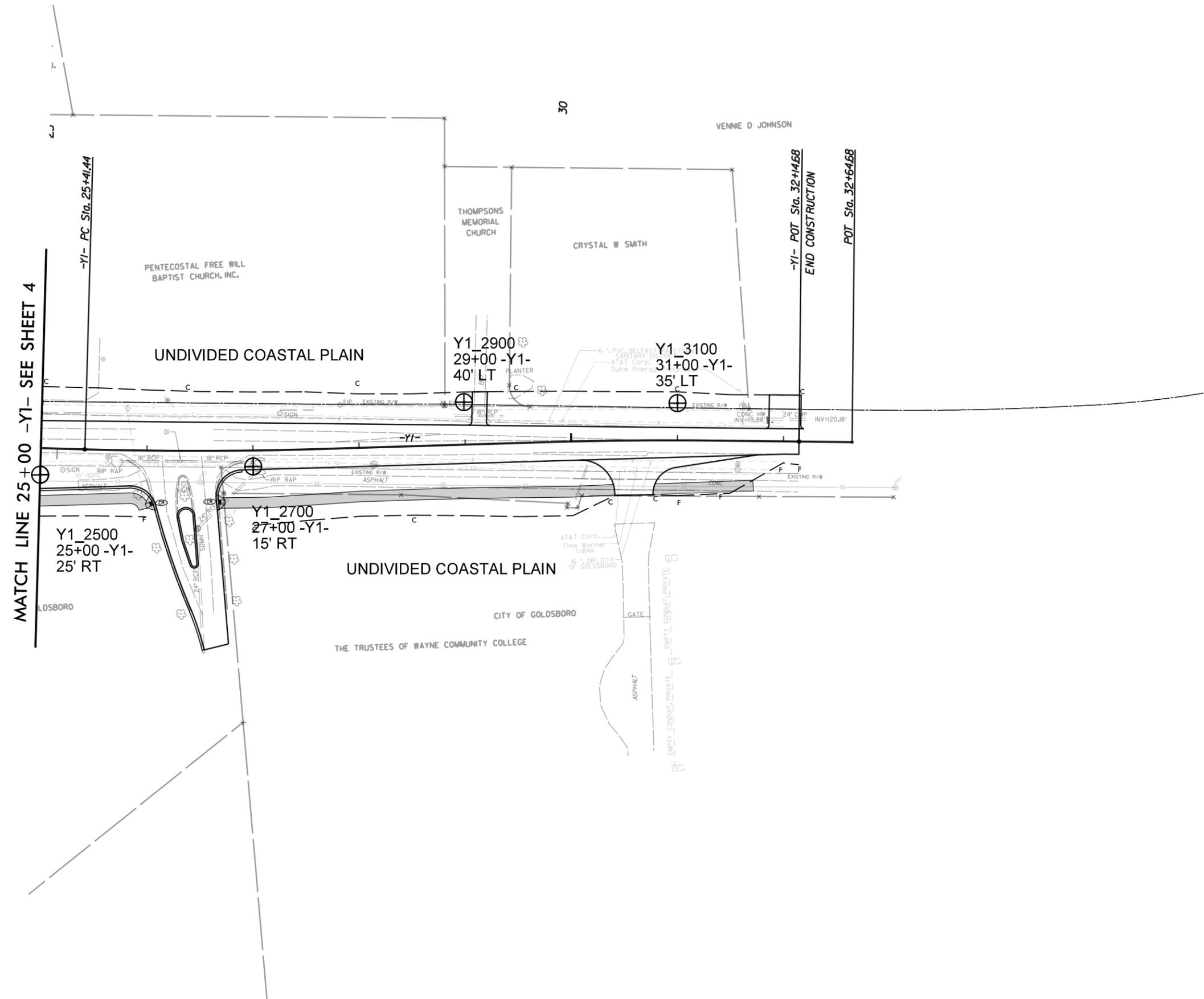
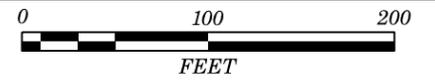


PROJECT REFERENCE NO.	SHEET NO.
U-4753	9
<p>0 100 200 FEET</p>	



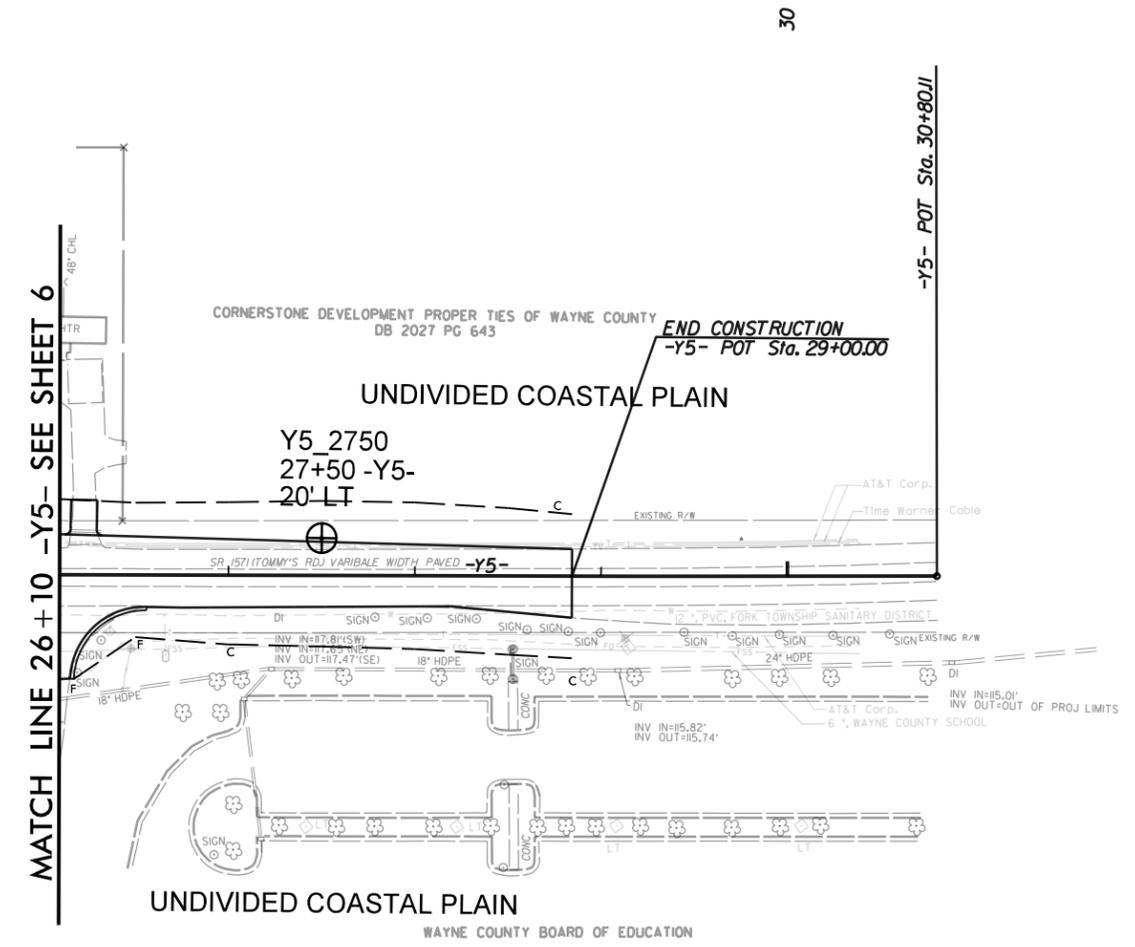
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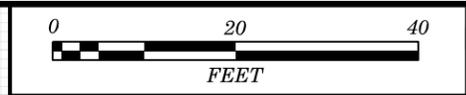
MATCH LINE 15+25 -Y1- SEE SHEET 4



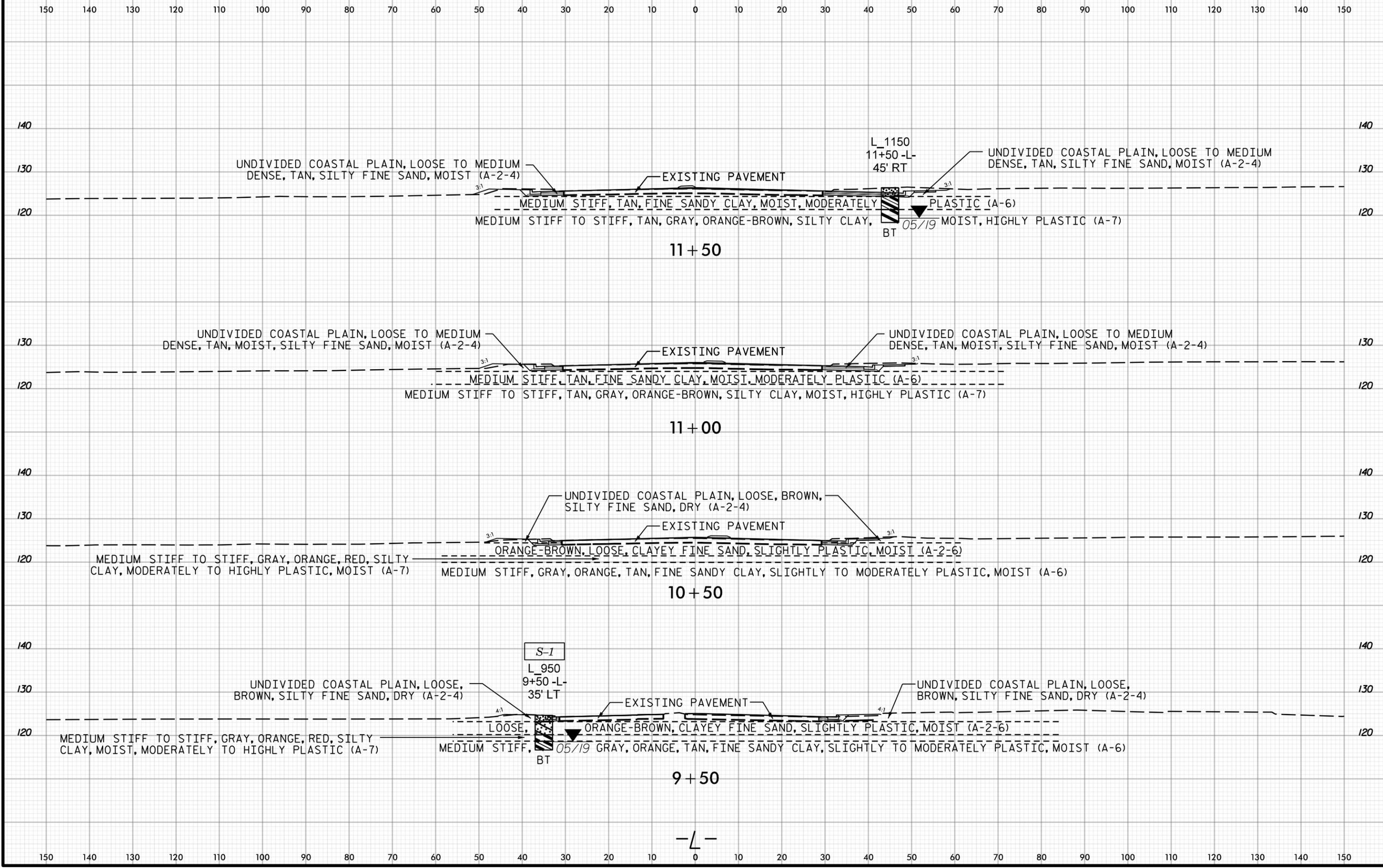


PROJECT REFERENCE NO.	SHEET NO.
U-4753	12
<p>0 100 200 FEET</p>	





PROJ. REFERENCE NO.	SHEET NO.
U-4753	13



UNDIVIDED COASTAL PLAIN, LOOSE TO MEDIUM DENSE, TAN, SILTY FINE SAND, MOIST (A-2-4)

EXISTING PAVEMENT

L 1150  
11+50 -L-  
45' RT

UNDIVIDED COASTAL PLAIN, LOOSE TO MEDIUM DENSE, TAN, SILTY FINE SAND, MOIST (A-2-4)

MEDIUM STIFF, TAN, FINE SANDY CLAY, MOIST, MODERATELY PLASTIC (A-6)  
MEDIUM STIFF TO STIFF, TAN, GRAY, ORANGE-BROWN, SILTY CLAY, MOIST, HIGHLY PLASTIC (A-7)

BT 05/19

11+50

UNDIVIDED COASTAL PLAIN, LOOSE TO MEDIUM DENSE, TAN, MOIST, SILTY FINE SAND, MOIST (A-2-4)

EXISTING PAVEMENT

UNDIVIDED COASTAL PLAIN, LOOSE TO MEDIUM DENSE, TAN, MOIST, SILTY FINE SAND, MOIST (A-2-4)

MEDIUM STIFF, TAN, FINE SANDY CLAY, MOIST, MODERATELY PLASTIC (A-6)  
MEDIUM STIFF TO STIFF, TAN, GRAY, ORANGE-BROWN, SILTY CLAY, MOIST, HIGHLY PLASTIC (A-7)

11+00

UNDIVIDED COASTAL PLAIN, LOOSE, BROWN, SILTY FINE SAND, DRY (A-2-4)

EXISTING PAVEMENT

MEDIUM STIFF TO STIFF, GRAY, ORANGE, RED, SILTY CLAY, MODERATELY TO HIGHLY PLASTIC, MOIST (A-7)

ORANGE-BROWN, LOOSE, CLAYEY FINE SAND, SLIGHTLY PLASTIC, MOIST (A-2-6)  
MEDIUM STIFF, GRAY, ORANGE, TAN, FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC, MOIST (A-6)

10+50

UNDIVIDED COASTAL PLAIN, LOOSE, BROWN, SILTY FINE SAND, DRY (A-2-4)

EXISTING PAVEMENT

UNDIVIDED COASTAL PLAIN, LOOSE, BROWN, SILTY FINE SAND, DRY (A-2-4)

MEDIUM STIFF TO STIFF, GRAY, ORANGE, RED, SILTY CLAY, MOIST, MODERATELY TO HIGHLY PLASTIC (A-7)

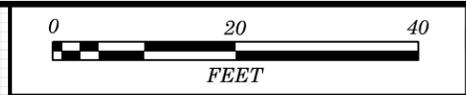
LOOSE, ORANGE-BROWN, CLAYEY FINE SAND, SLIGHTLY PLASTIC, MOIST (A-2-6)  
MEDIUM STIFF, GRAY, ORANGE, TAN, FINE SANDY CLAY, SLIGHTLY TO MODERATELY PLASTIC, MOIST (A-6)

S-1

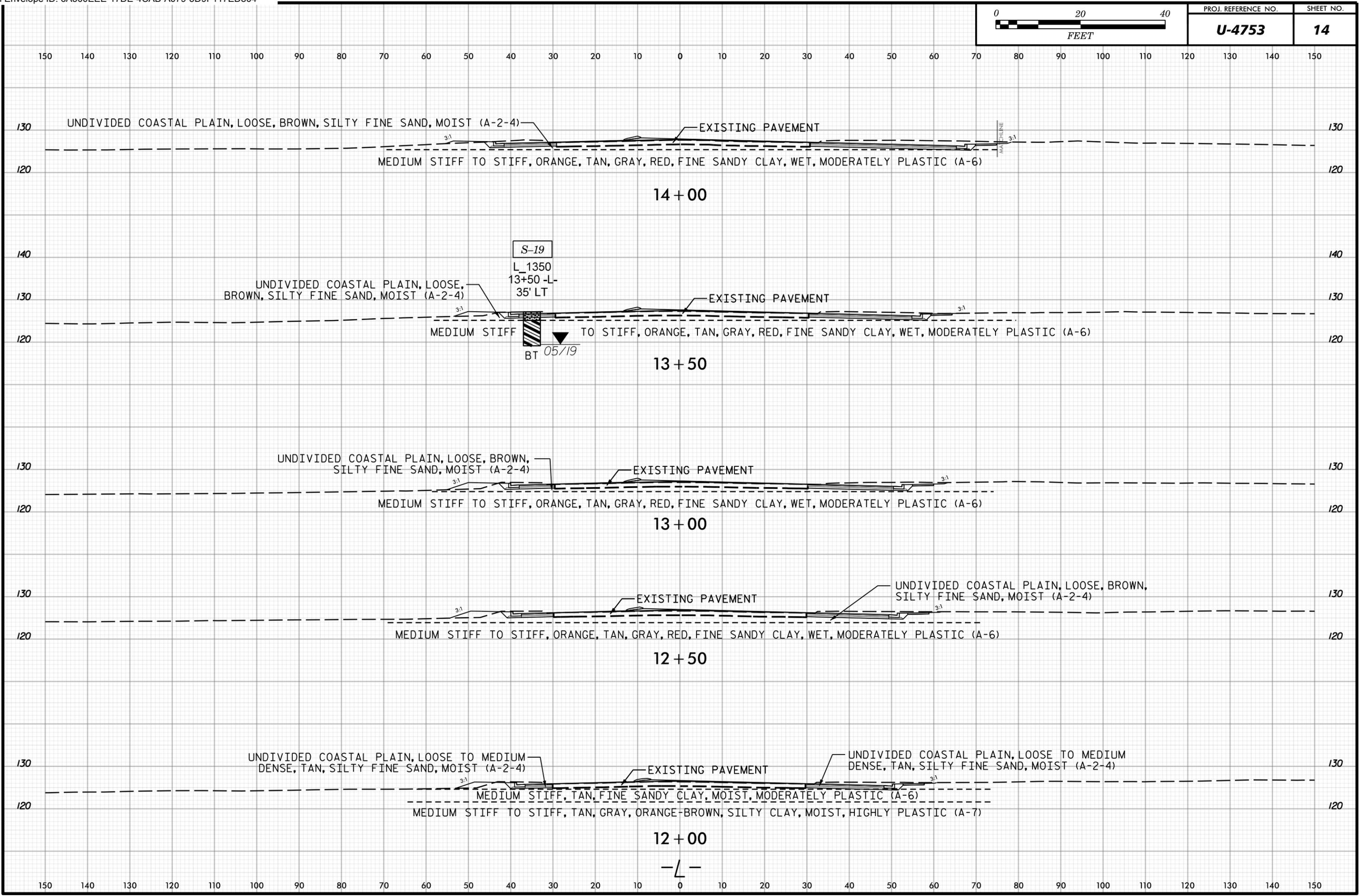
L 950  
9+50 -L-  
35' LT

9+50

-L-



PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>14</b>



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

130 120 130 120

120 130 120 130

140 130 140 130

130 120 130 120

120 130 120 130

130 120 130 120

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14 + 00

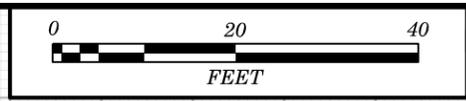
13 + 50

13 + 00

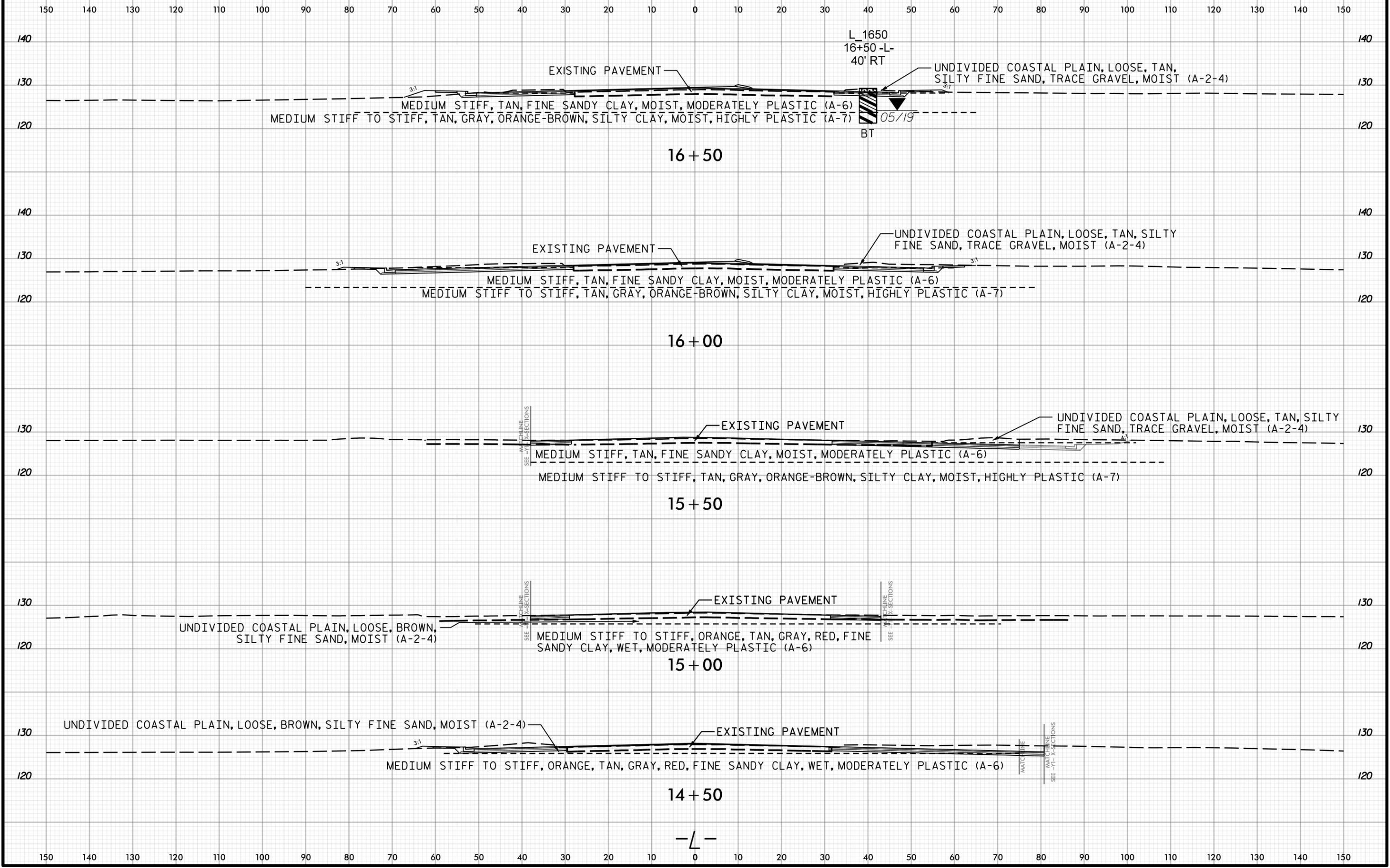
12 + 50

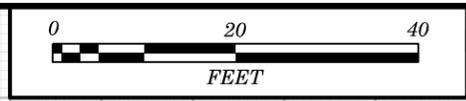
12 + 00

-L-

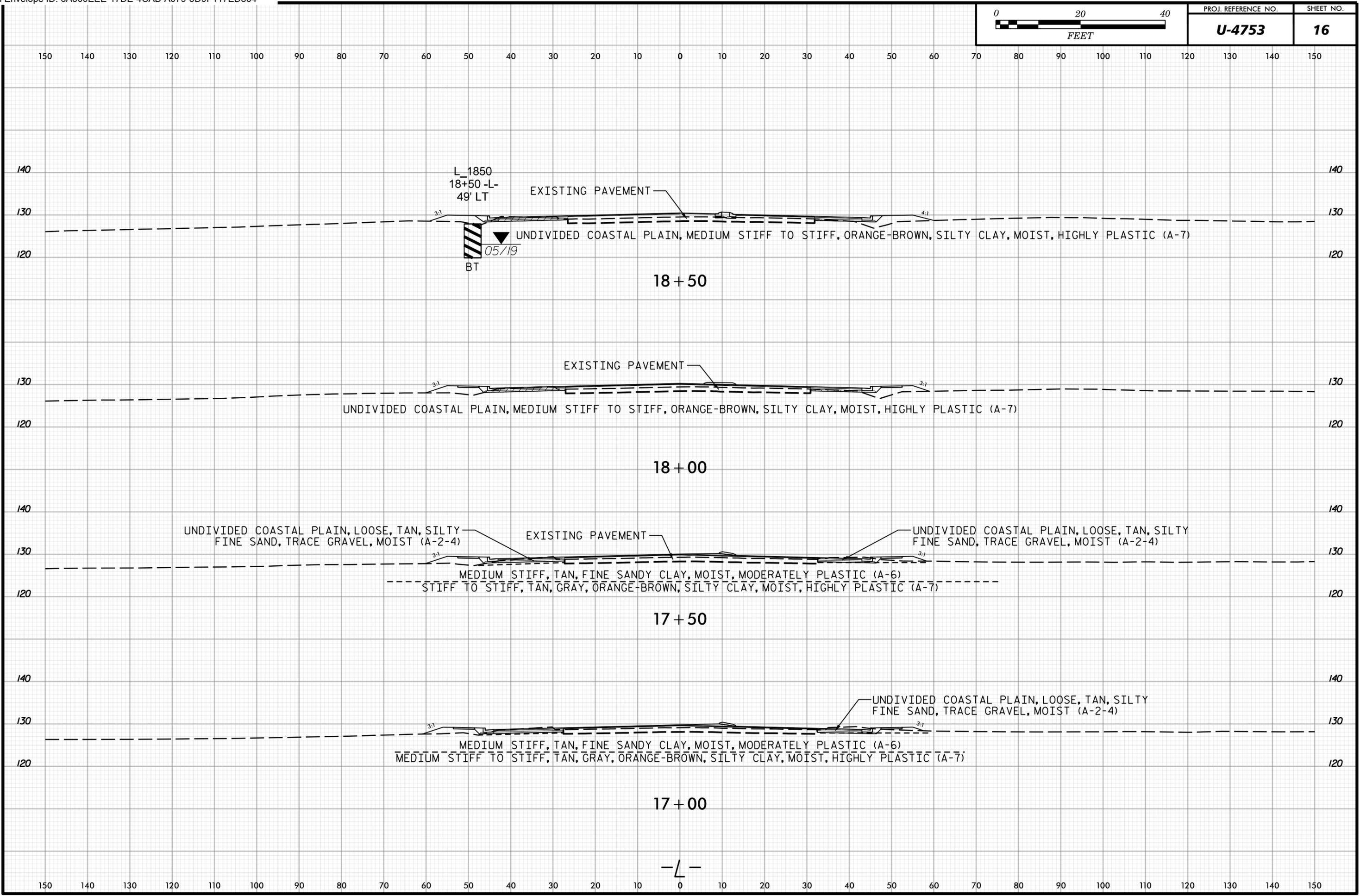


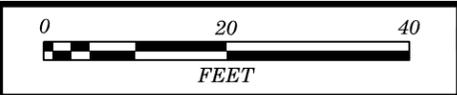
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<b>U-4753</b>	<b>15</b>



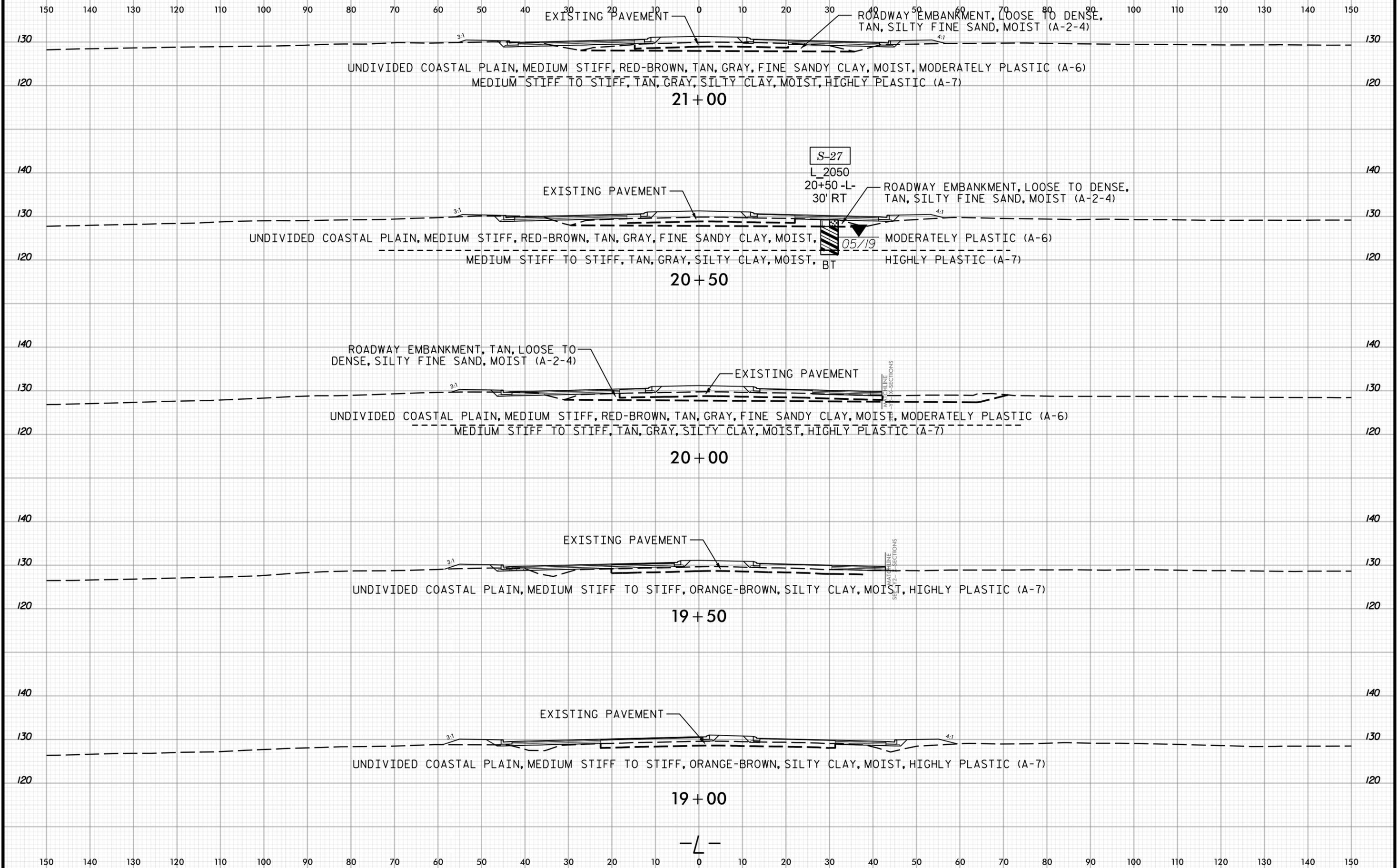


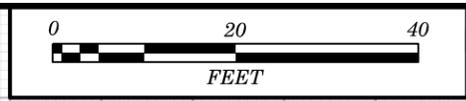
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<b>U-4753</b>	<b>16</b>



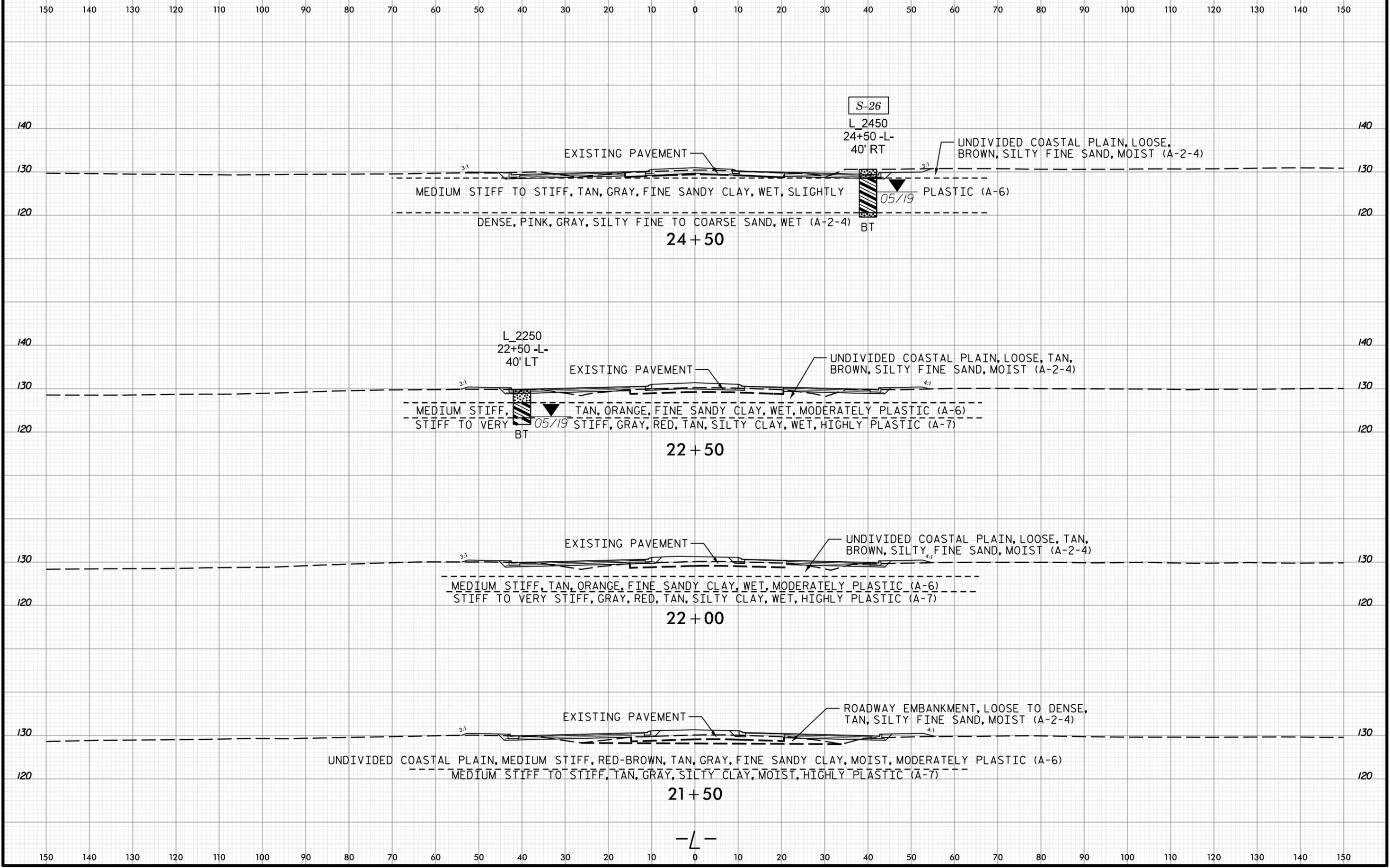


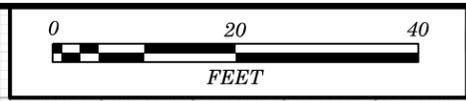
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<b>U-4753</b>	<b>17</b>



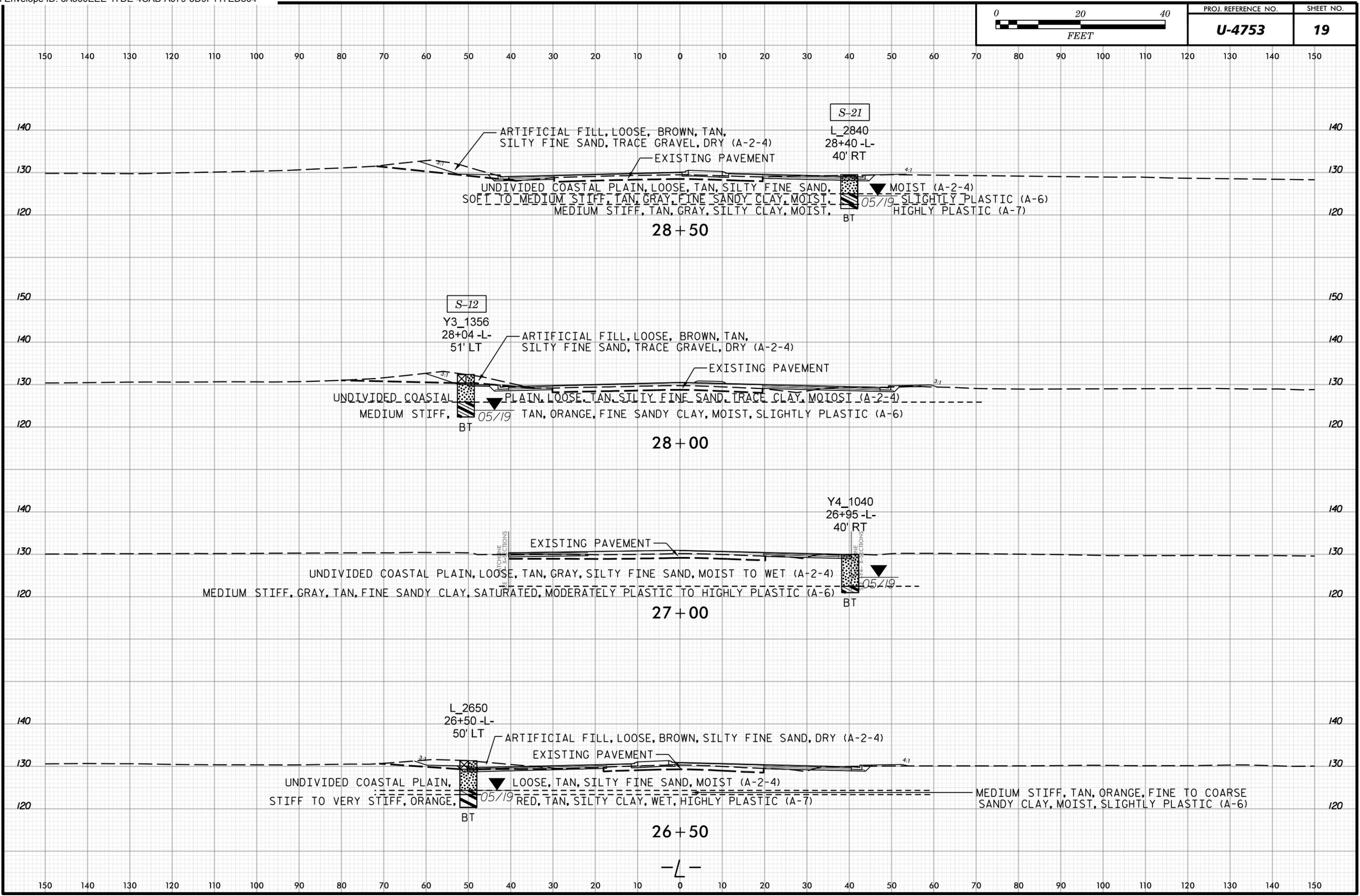


PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>18</b>





PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>19</b>



S-21  
L\_2840  
28+40 -L-  
40' RT

ARTIFICIAL FILL, LOOSE, BROWN, TAN,  
SILTY FINE SAND, TRACE GRAVEL, DRY (A-2-4)  
EXISTING PAVEMENT  
UNDIVIDED COASTAL PLAIN, LOOSE, TAN, SILTY FINE SAND,  
SOFT TO MEDIUM STIFF, TAN, GRAY, FINE SANDY CLAY, MOIST,  
MEDIUM STIFF, TAN, GRAY, SILTY CLAY, MOIST,  
MOIST (A-2-4)  
SLIGHTLY PLASTIC (A-6)  
HIGHLY PLASTIC (A-7)

28 + 50

S-12  
Y3\_1356  
28+04 -L-  
51' LT

ARTIFICIAL FILL, LOOSE, BROWN, TAN,  
SILTY FINE SAND, TRACE GRAVEL, DRY (A-2-4)  
EXISTING PAVEMENT  
UNDIVIDED COASTAL PLAIN, LOOSE, TAN, SILTY FINE SAND, TRACE CLAY, MOIST (A-2-4)  
MEDIUM STIFF, TAN, ORANGE, FINE SANDY CLAY, MOIST, SLIGHTLY PLASTIC (A-6)

28 + 00

Y4\_1040  
26+95 -L-  
40' RT

EXISTING PAVEMENT  
UNDIVIDED COASTAL PLAIN, LOOSE, TAN, GRAY, SILTY FINE SAND, MOIST TO WET (A-2-4)  
MEDIUM STIFF, GRAY, TAN, FINE SANDY CLAY, SATURATED, MODERATELY PLASTIC TO HIGHLY PLASTIC (A-6)

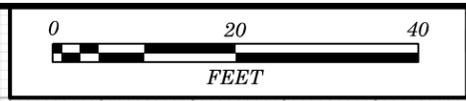
27 + 00

L\_2650  
26+50 -L-  
50' LT

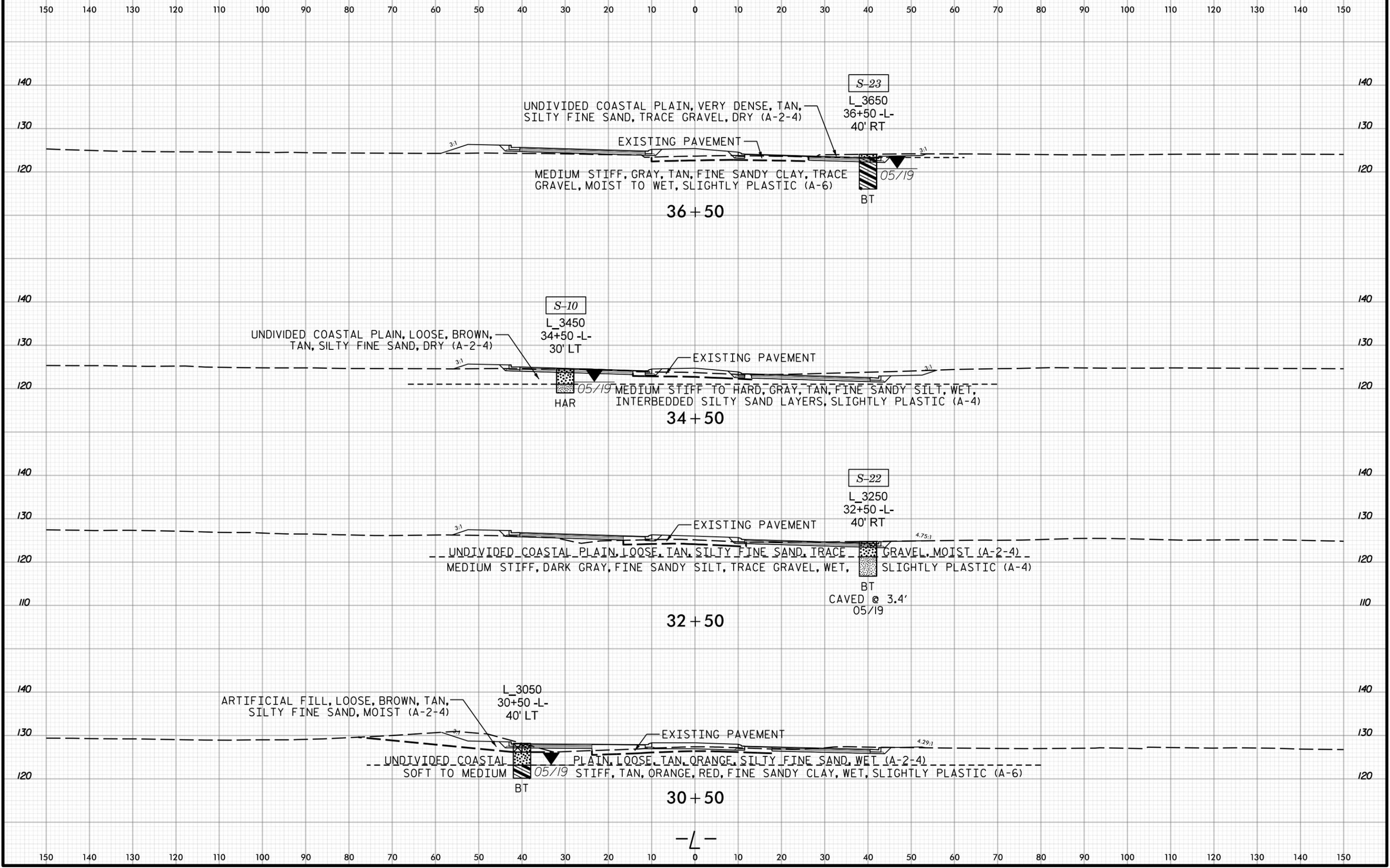
ARTIFICIAL FILL, LOOSE, BROWN, SILTY FINE SAND, DRY (A-2-4)  
EXISTING PAVEMENT  
UNDIVIDED COASTAL PLAIN,  
STIFF TO VERY STIFF, ORANGE,  
LOOSE, TAN, SILTY FINE SAND, MOIST (A-2-4)  
RED, TAN, SILTY CLAY, WET, HIGHLY PLASTIC (A-7)  
MEDIUM STIFF, TAN, ORANGE, FINE TO COARSE  
SANDY CLAY, MOIST, SLIGHTLY PLASTIC (A-6)

26 + 50

-L-



PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>20</b>



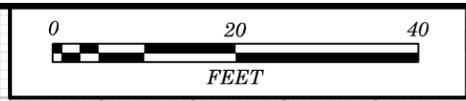
36 + 50

34 + 50

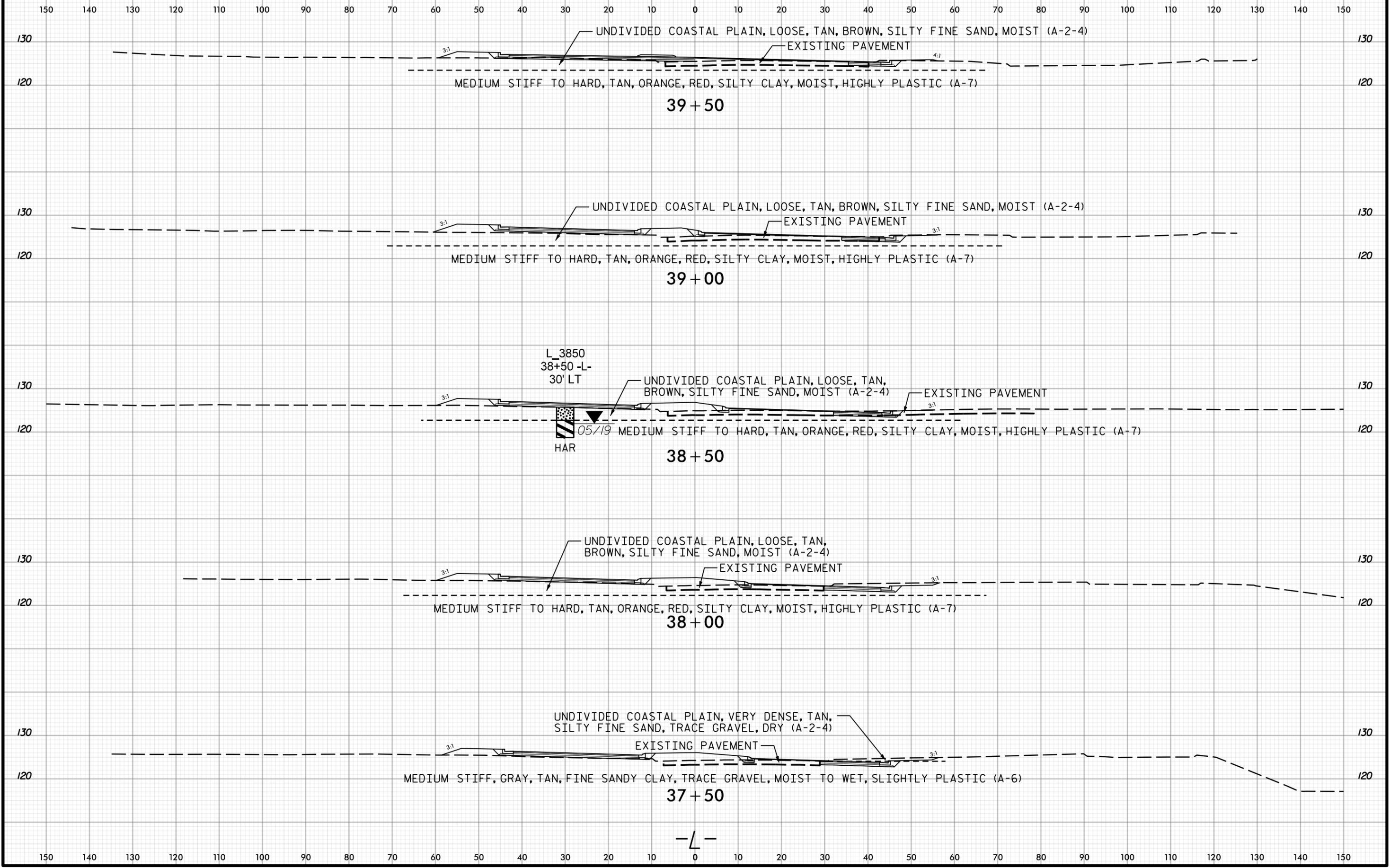
32 + 50

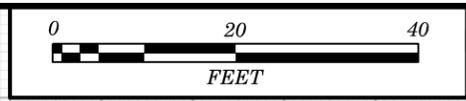
30 + 50

-L-

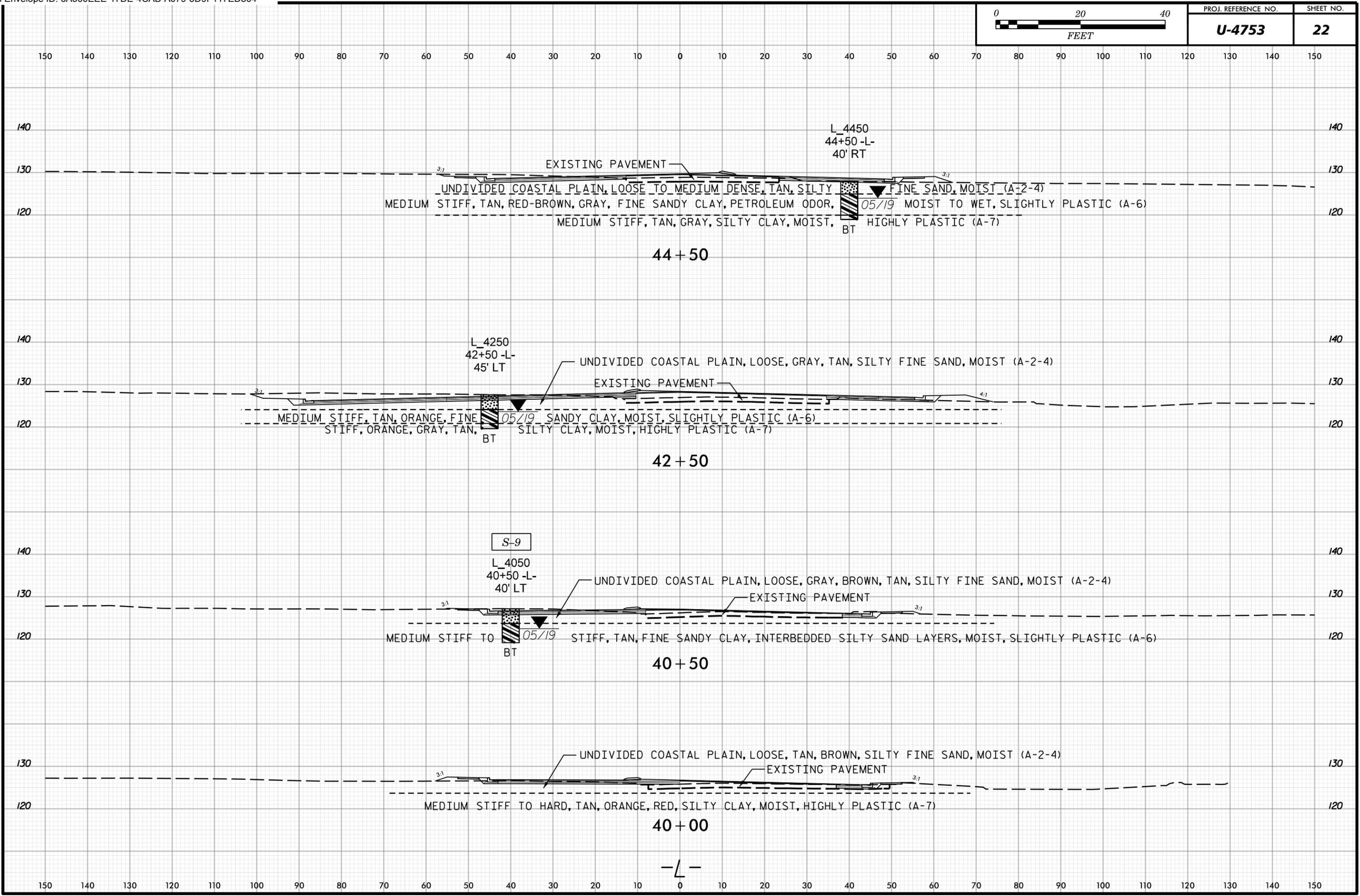


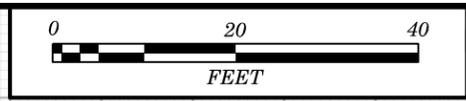
PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>21</b>



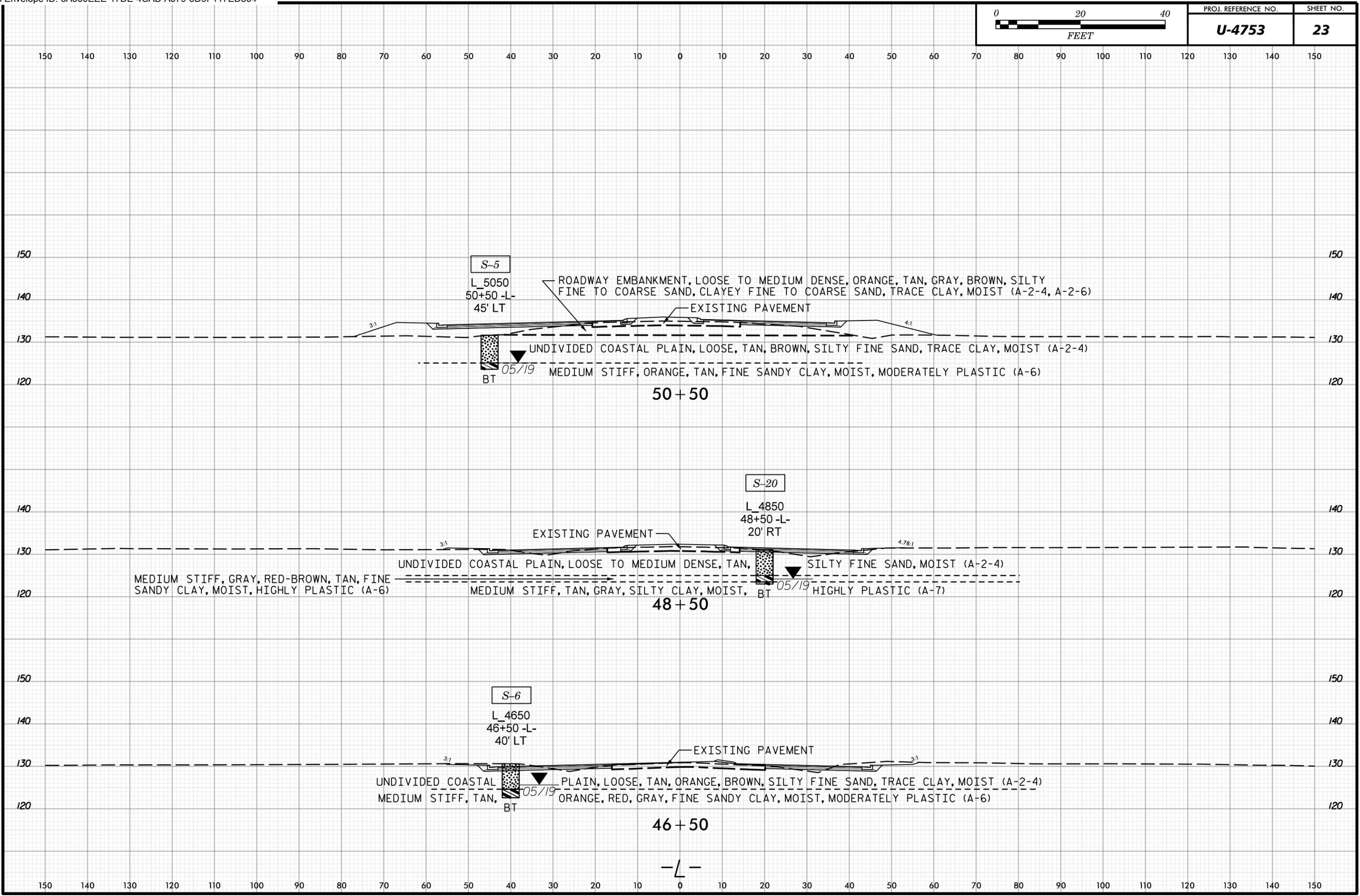


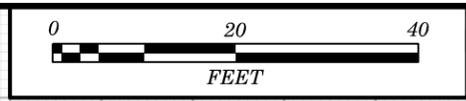
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<b>U-4753</b>	<b>22</b>



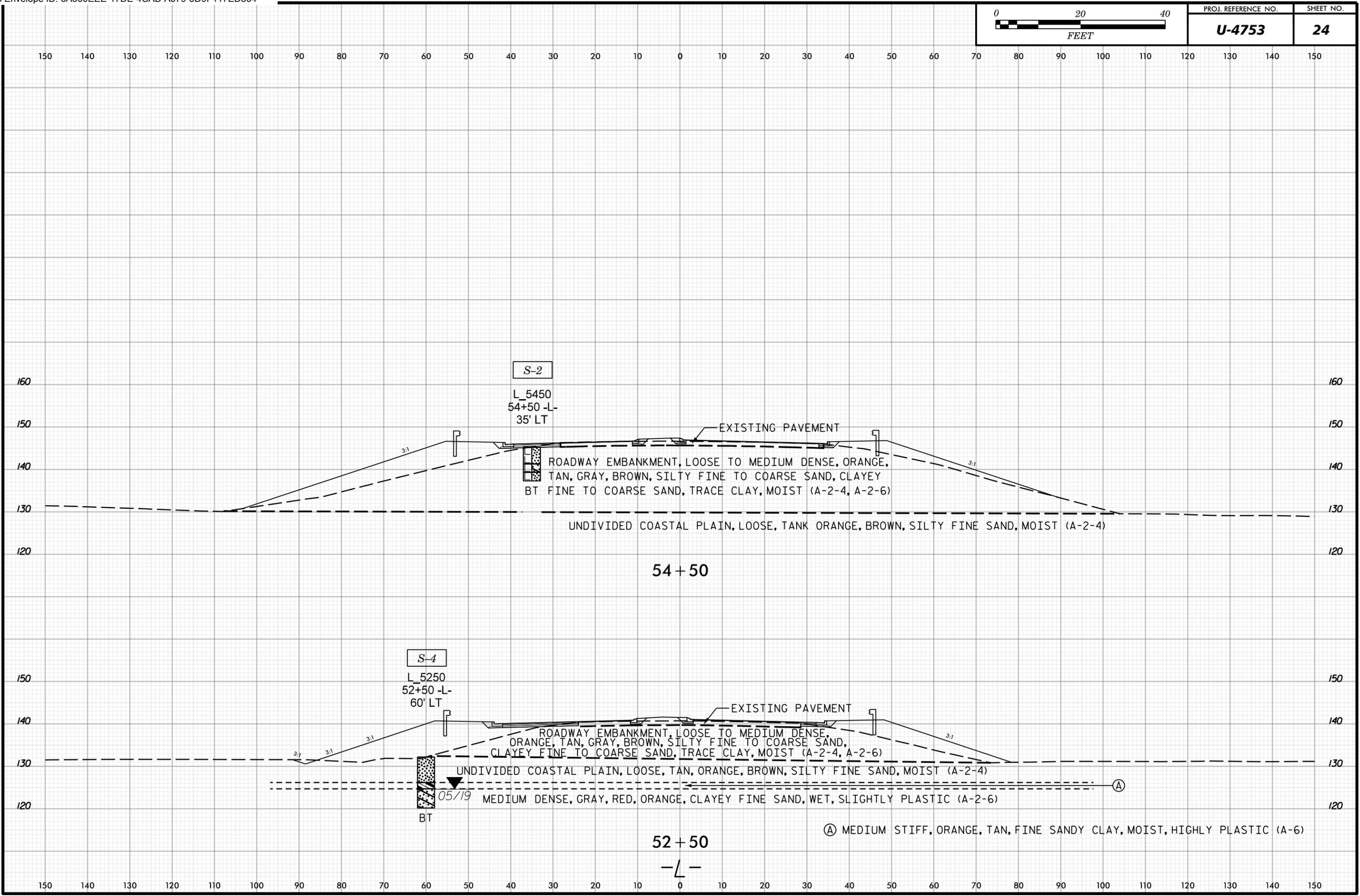


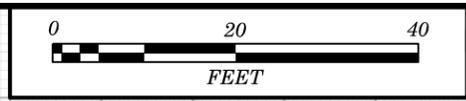
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<b>U-4753</b>	<b>23</b>



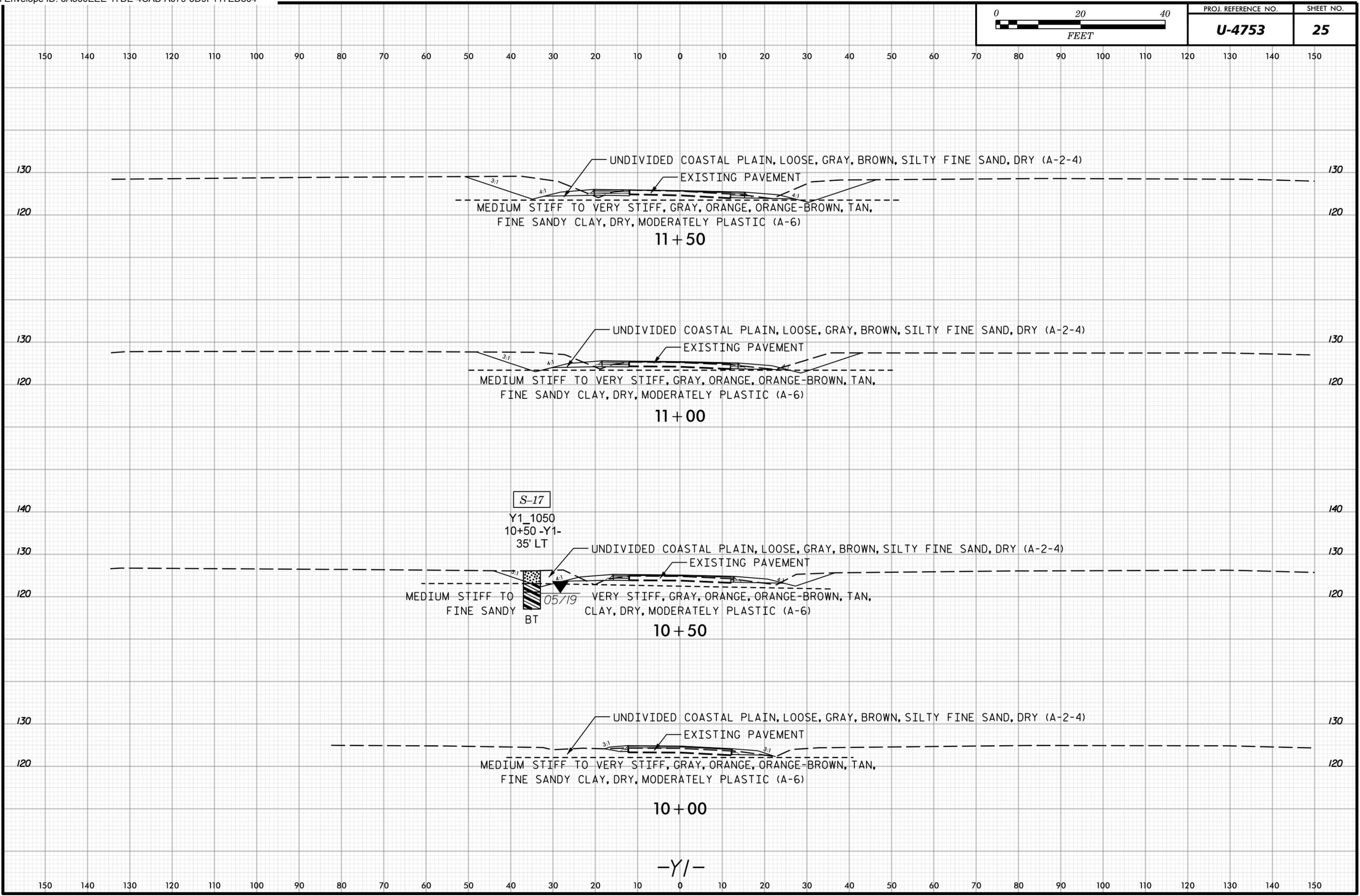


PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>24</b>





PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>25</b>



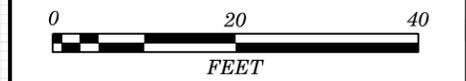
11+50

11+00

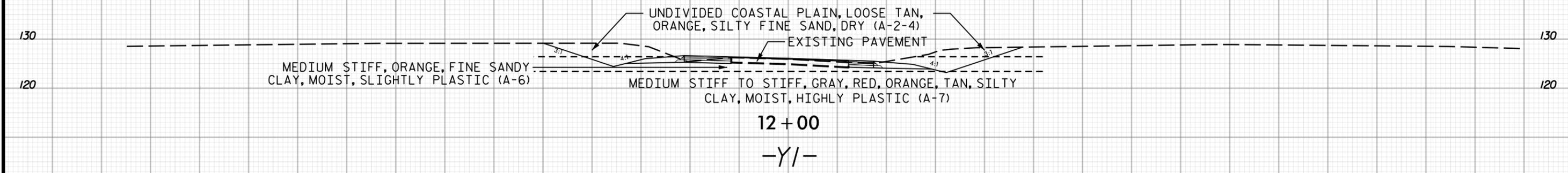
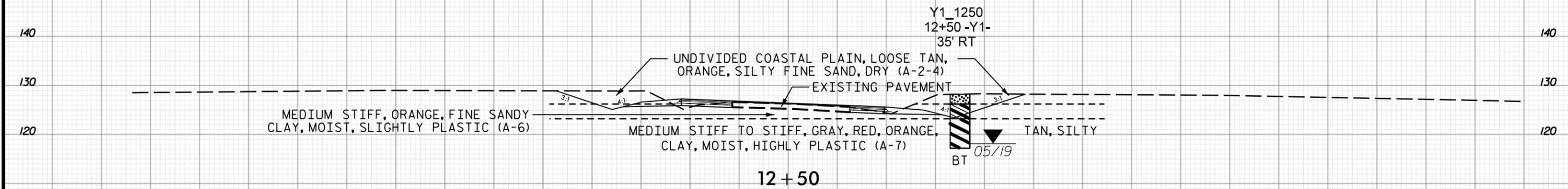
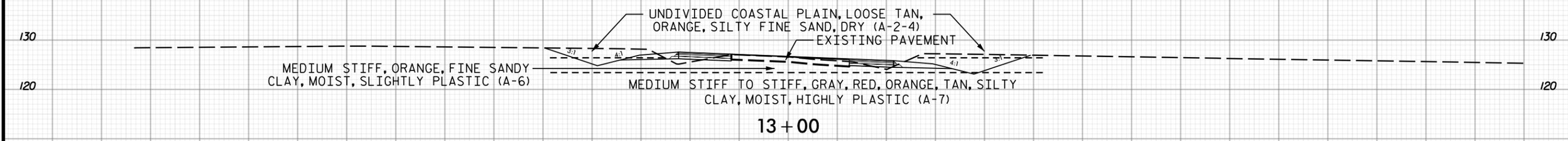
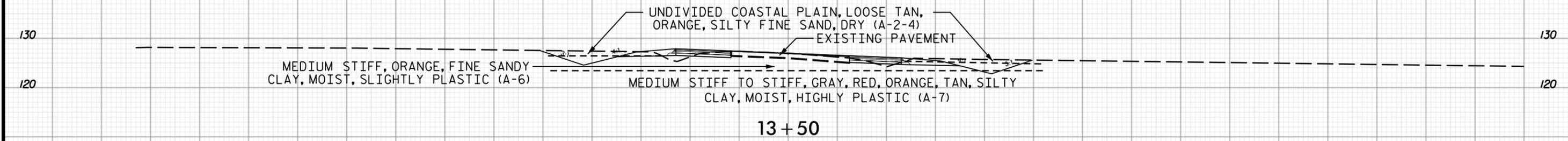
10+50

10+00

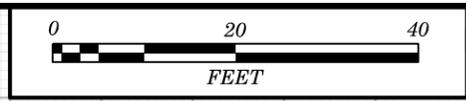
-Y/-



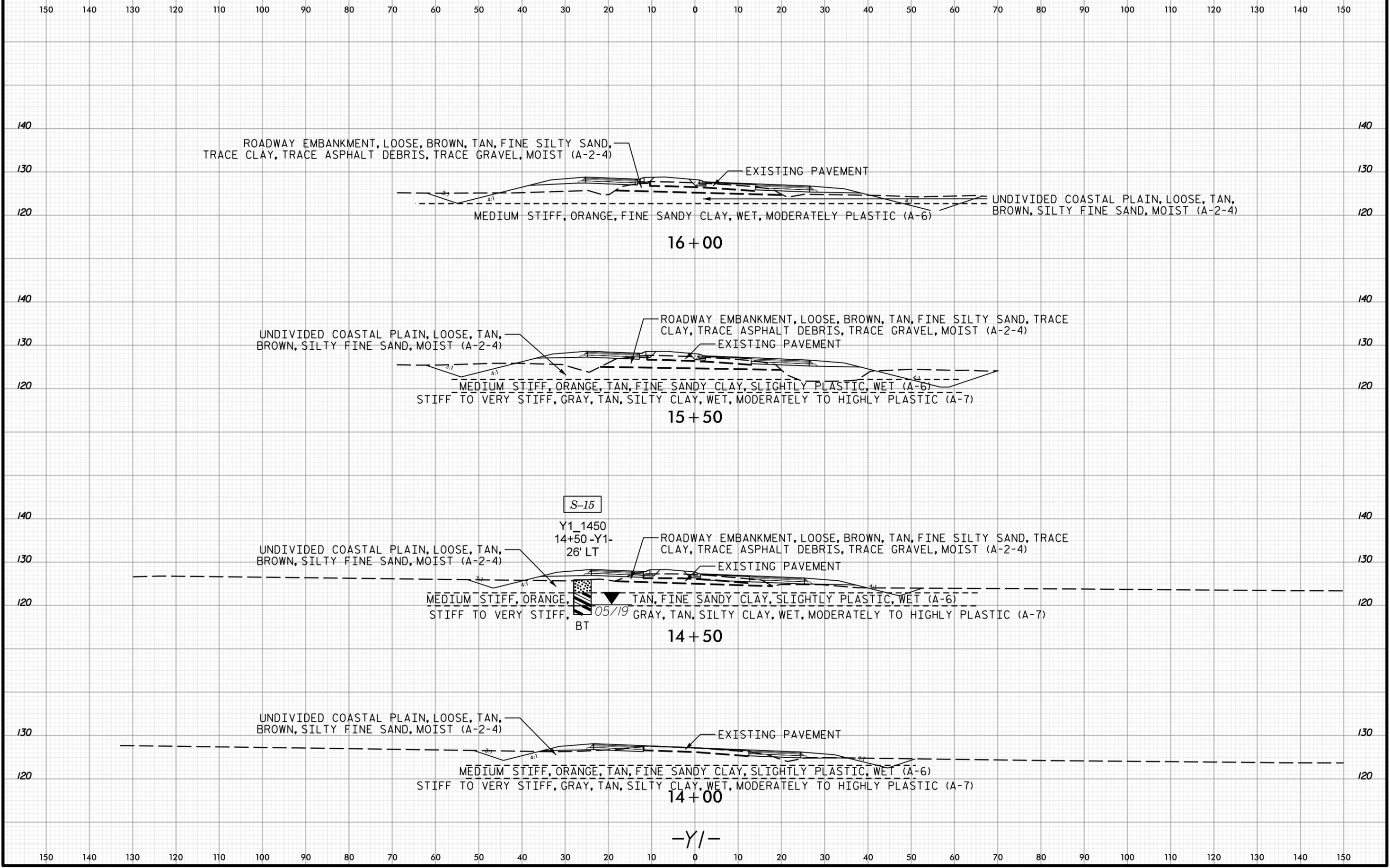
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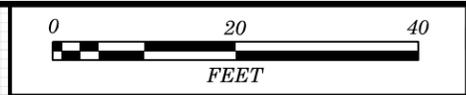
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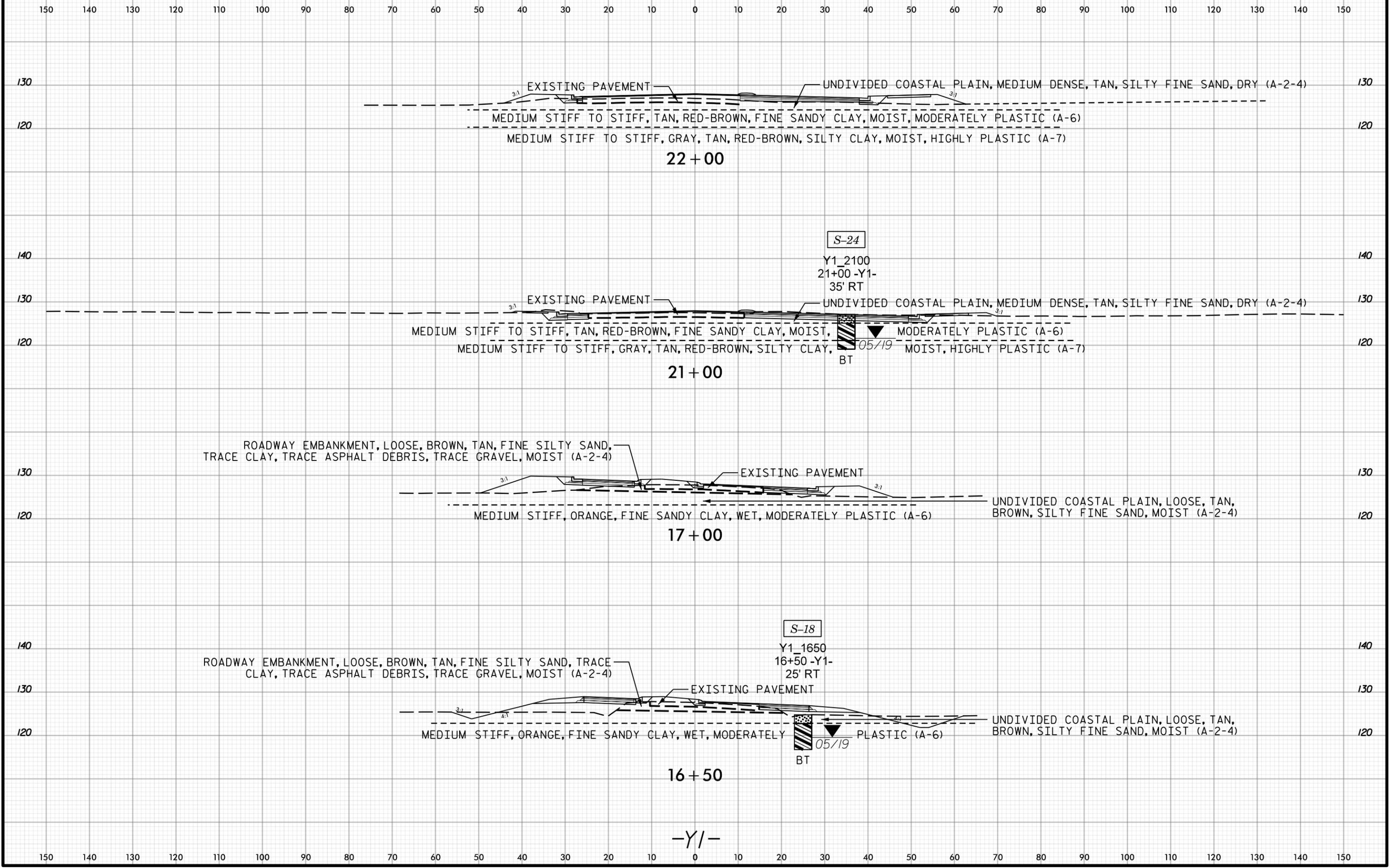
PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>27</b>

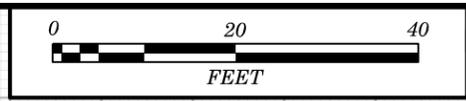


-Y/-

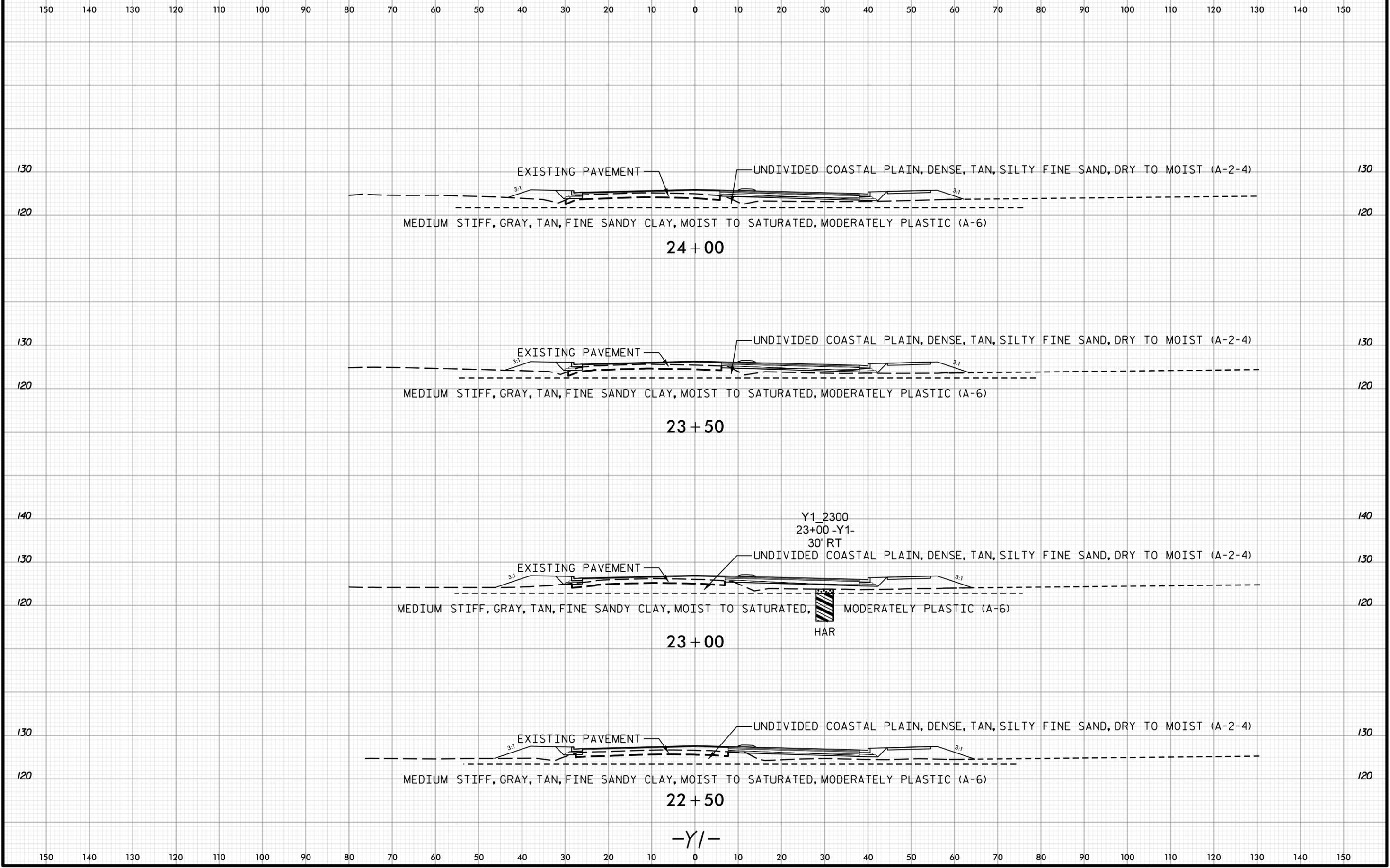


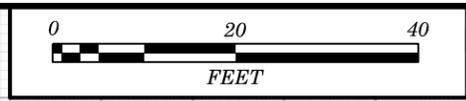
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<b>U-4753</b>	<b>28</b>



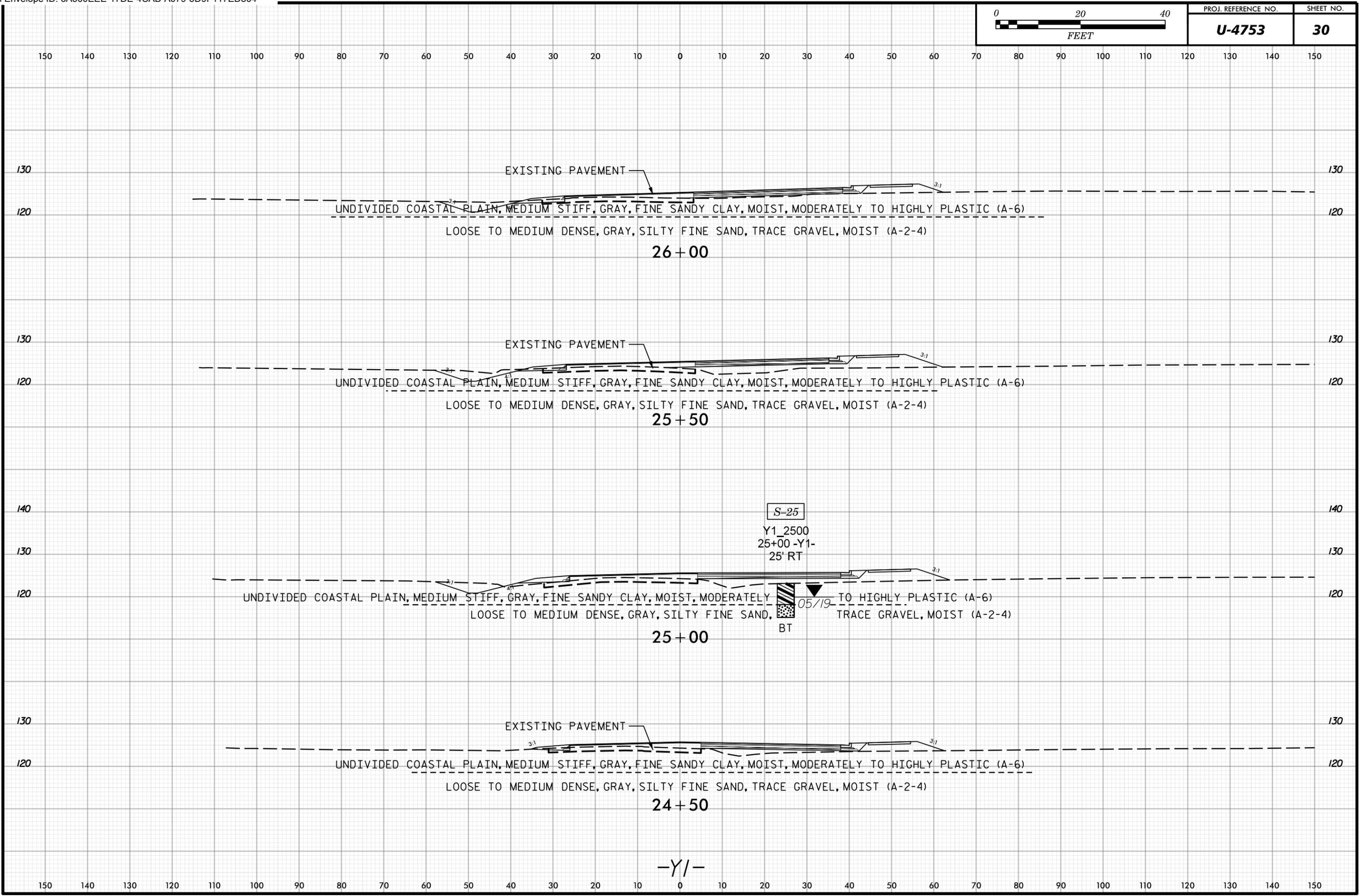


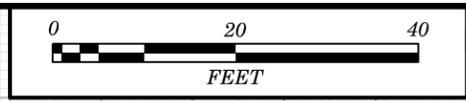
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<b>U-4753</b>	<b>29</b>



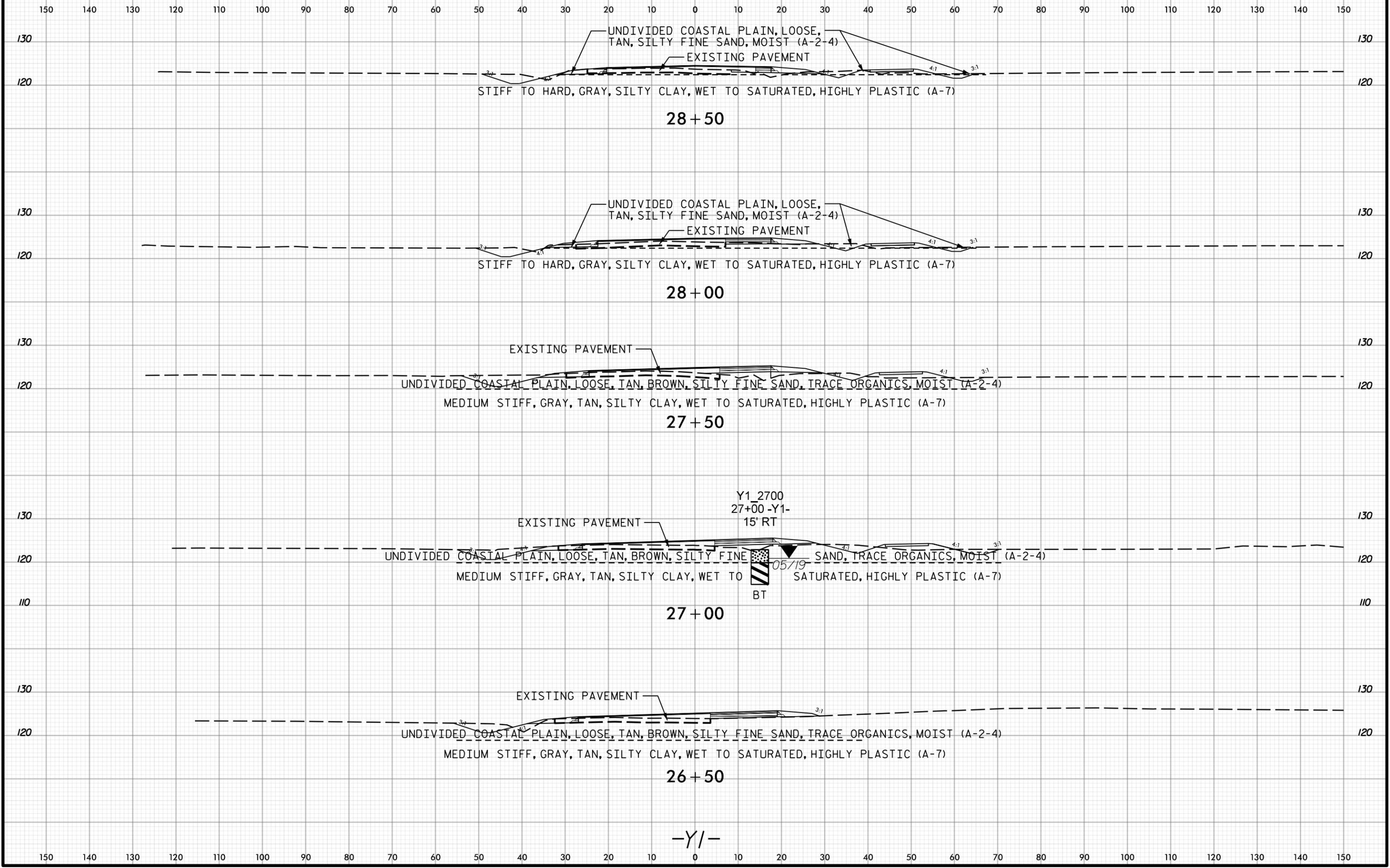


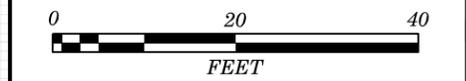
PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>30</b>





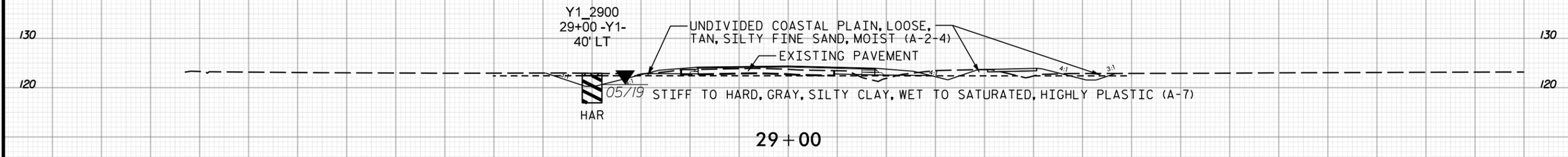
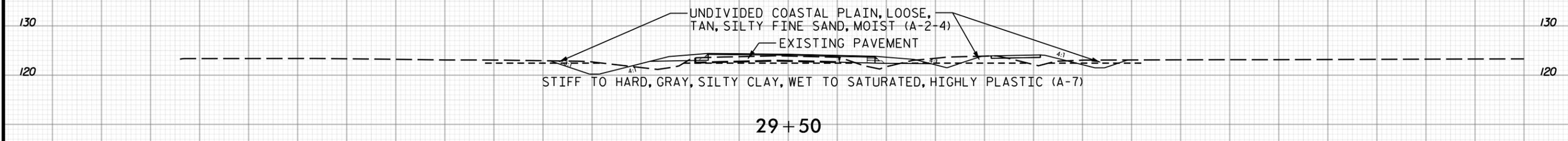
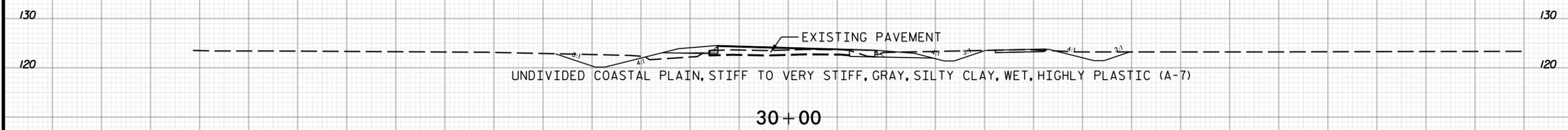
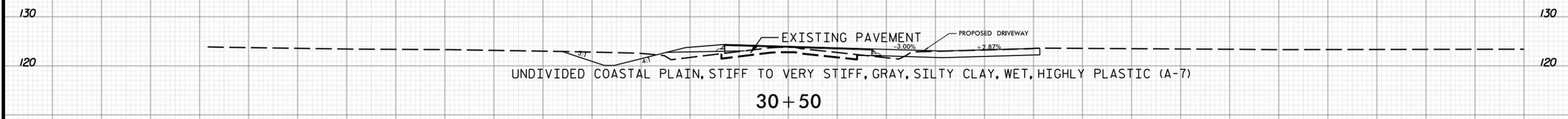
PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>31</b>





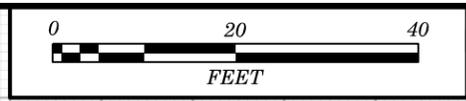
PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>32</b>

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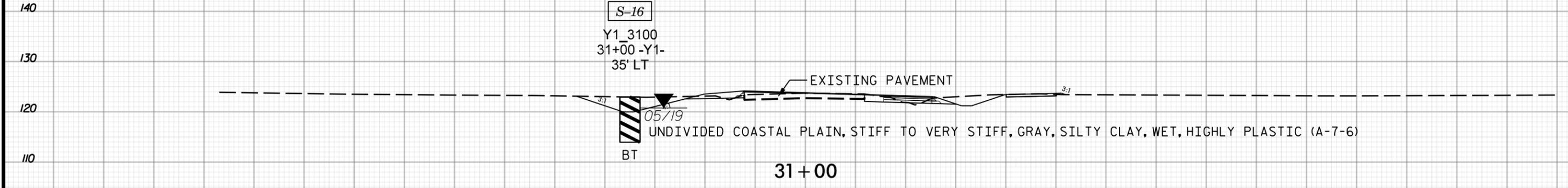
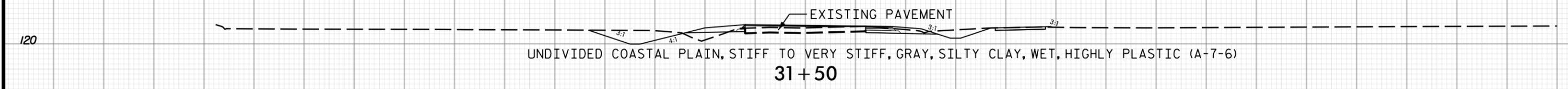
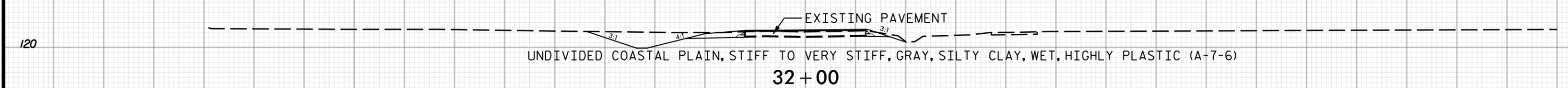
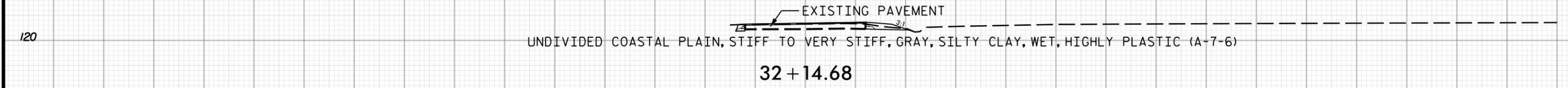
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-Y/-



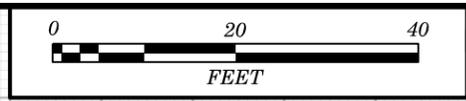
PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>33</b>

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

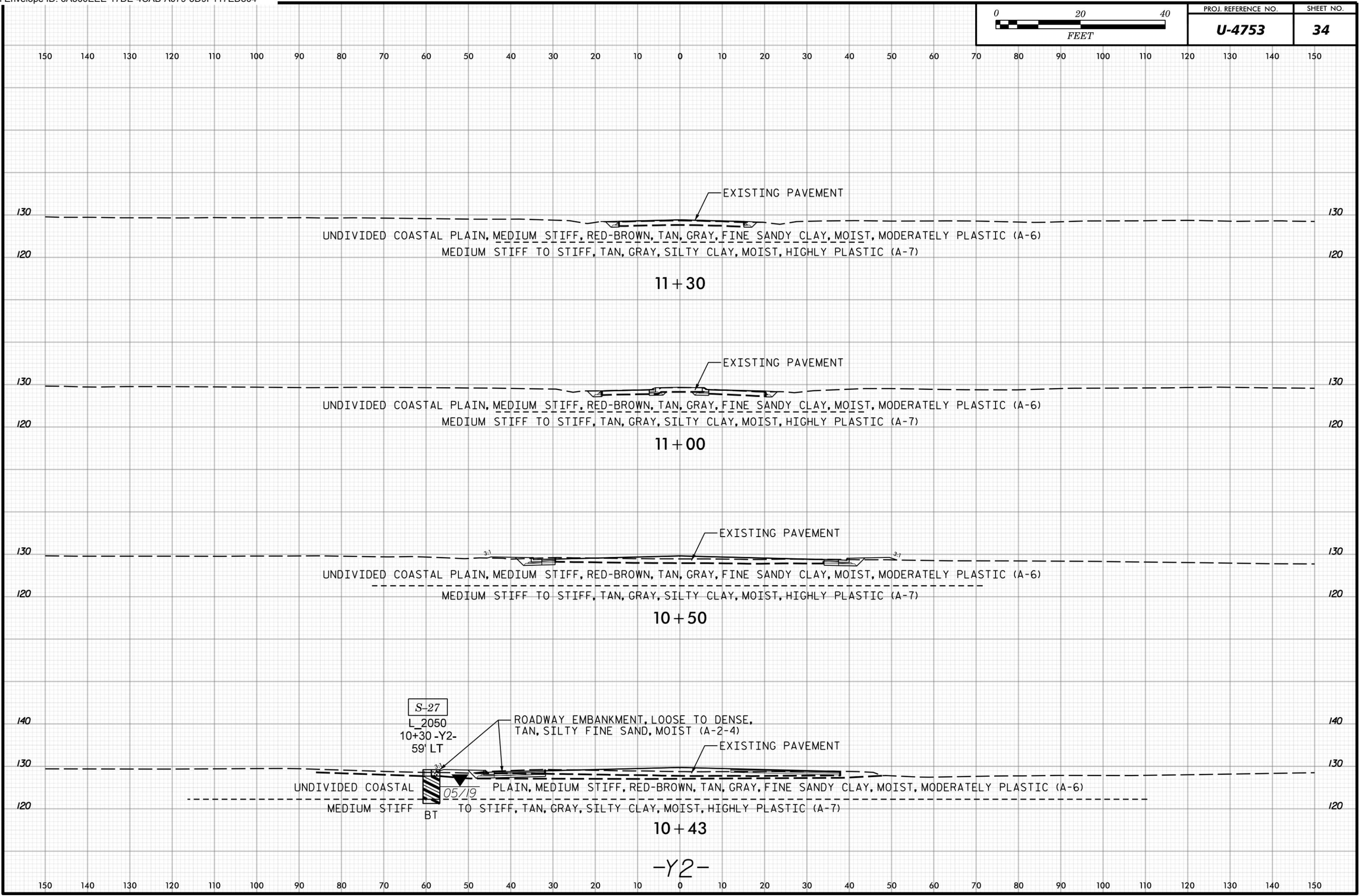


150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

-Y/-



PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>34</b>



11 + 30

11 + 00

10 + 50

10 + 43

-Y2-

S-27  
 L-2050  
 10+30-Y2-  
 59' LT

05/19  
 BT

ROADWAY EMBANKMENT, LOOSE TO DENSE,  
 TAN, SILTY FINE SAND, MOIST (A-2-4)

UNDIVIDED COASTAL PLAIN, MEDIUM STIFF, RED-BROWN, TAN, GRAY, FINE SANDY CLAY, MOIST, MODERATELY PLASTIC (A-6)  
 MEDIUM STIFF TO STIFF, TAN, GRAY, SILTY CLAY, MOIST, HIGHLY PLASTIC (A-7)

UNDIVIDED COASTAL PLAIN, MEDIUM STIFF, RED-BROWN, TAN, GRAY, FINE SANDY CLAY, MOIST, MODERATELY PLASTIC (A-6)  
 MEDIUM STIFF TO STIFF, TAN, GRAY, SILTY CLAY, MOIST, HIGHLY PLASTIC (A-7)

UNDIVIDED COASTAL PLAIN, MEDIUM STIFF, RED-BROWN, TAN, GRAY, FINE SANDY CLAY, MOIST, MODERATELY PLASTIC (A-6)  
 MEDIUM STIFF TO STIFF, TAN, GRAY, SILTY CLAY, MOIST, HIGHLY PLASTIC (A-7)

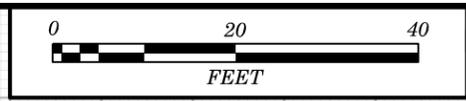
UNDIVIDED COASTAL PLAIN, MEDIUM STIFF, RED-BROWN, TAN, GRAY, FINE SANDY CLAY, MOIST, MODERATELY PLASTIC (A-6)  
 MEDIUM STIFF TO STIFF, TAN, GRAY, SILTY CLAY, MOIST, HIGHLY PLASTIC (A-7)

EXISTING PAVEMENT

EXISTING PAVEMENT

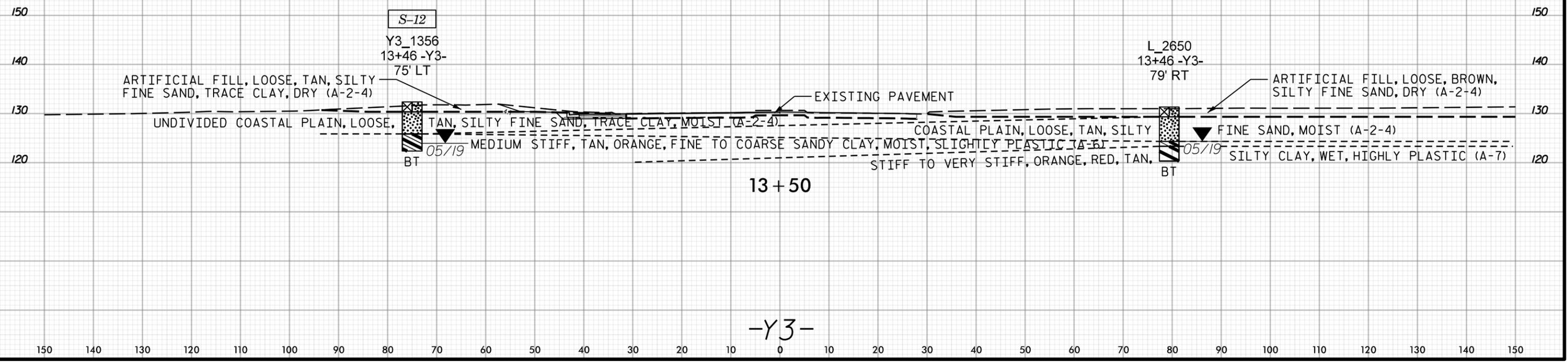
EXISTING PAVEMENT

EXISTING PAVEMENT



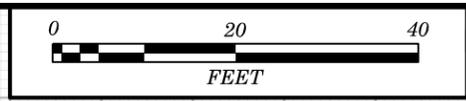
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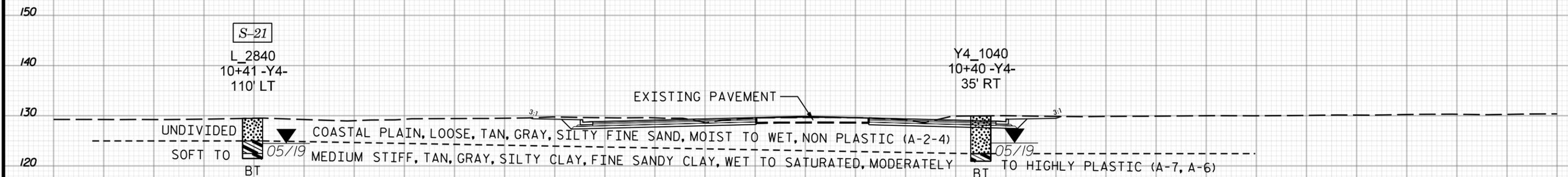
13 + 50

-Y3-



PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>36</b>

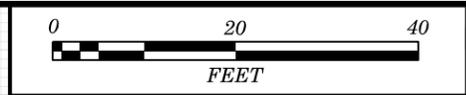
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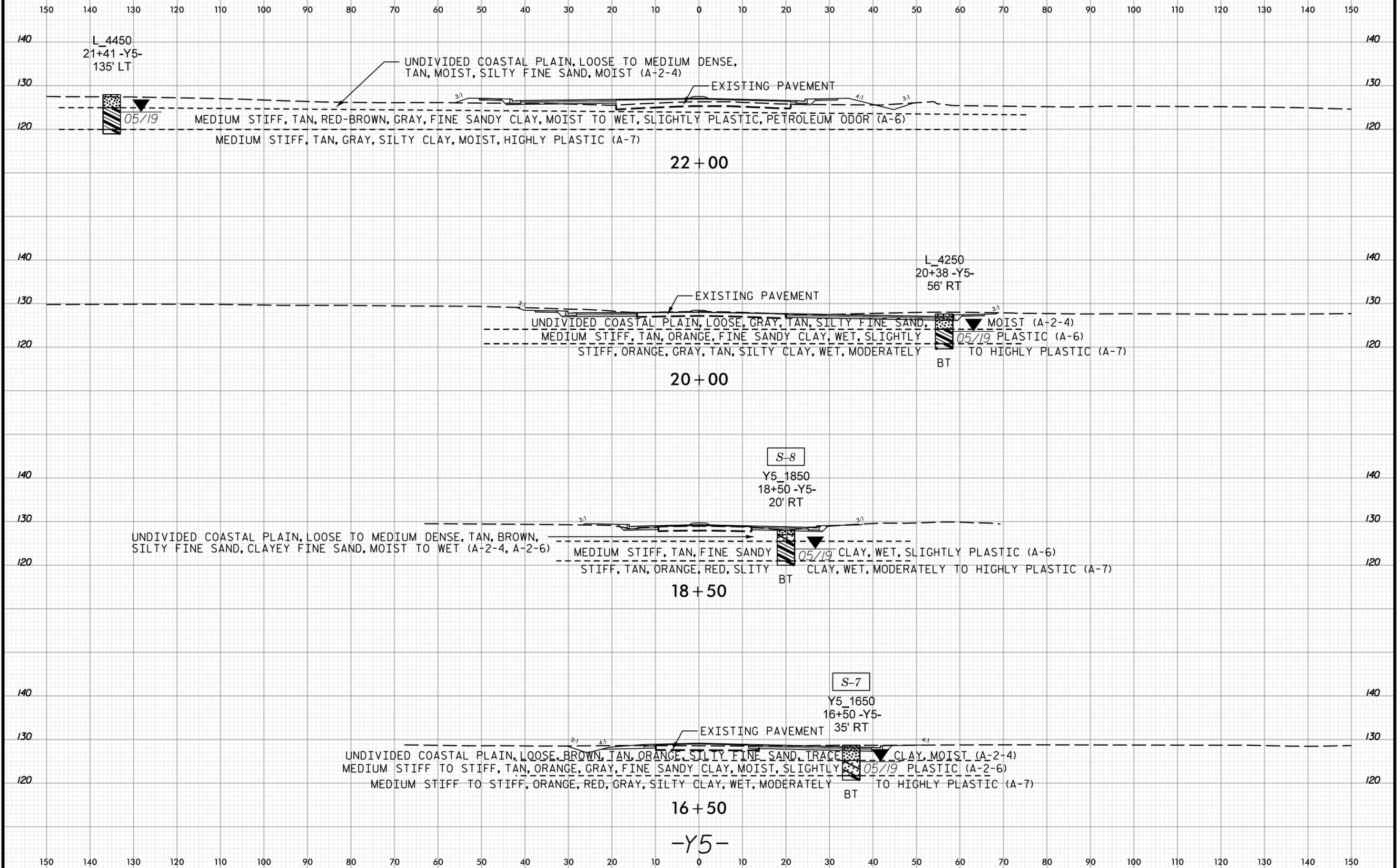
10 + 40.50

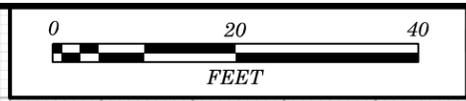
-Y4-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

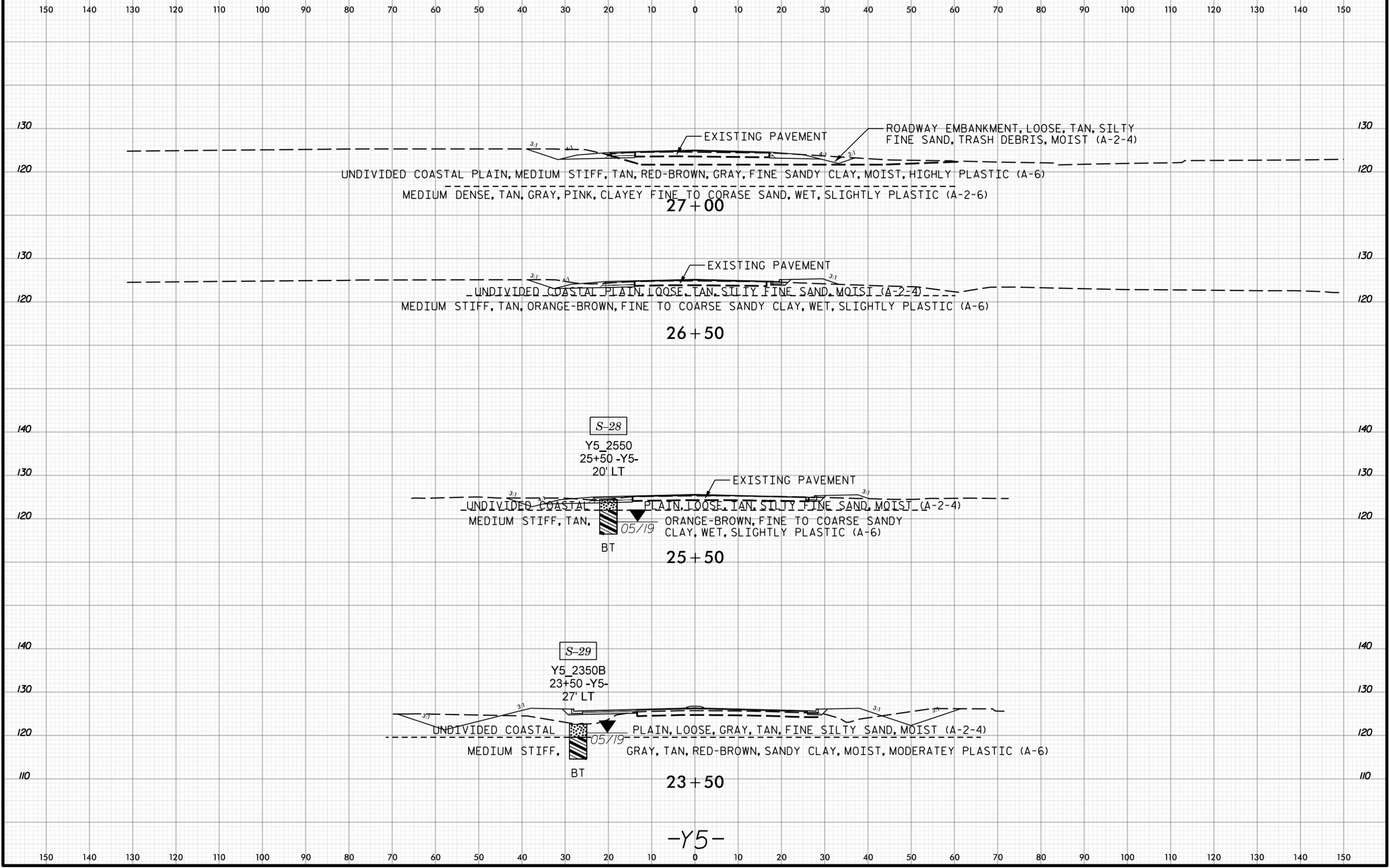


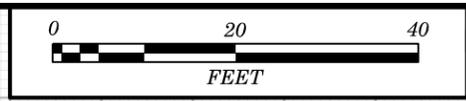
PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>37</b>





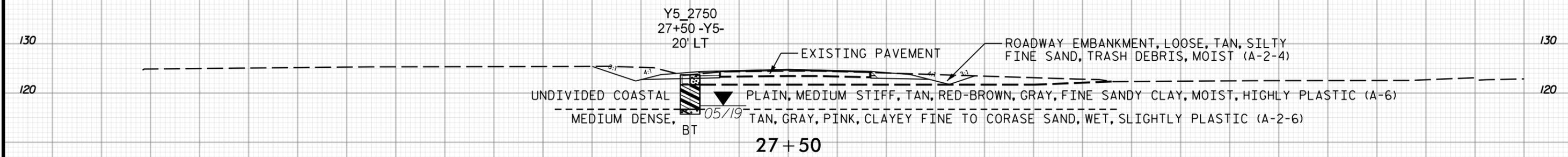
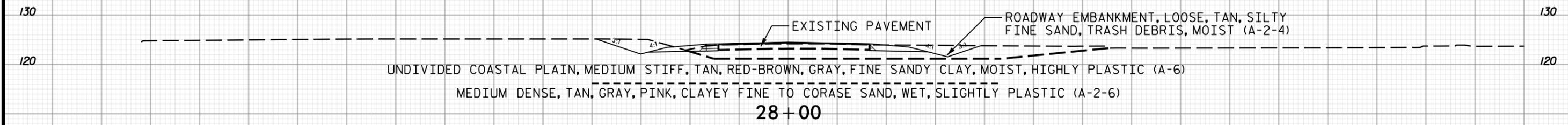
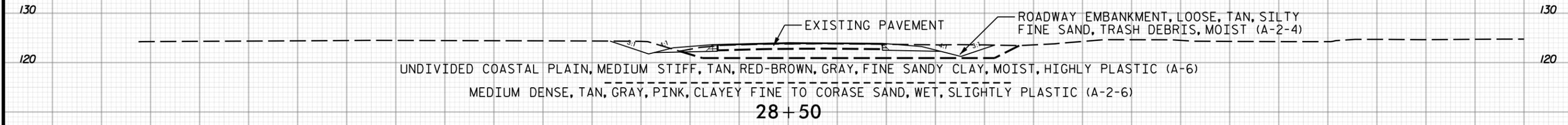
PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>38</b>





PROJ. REFERENCE NO.	SHEET NO.
<b>U-4753</b>	<b>39</b>

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150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

-Y5-

